

Gridley City Council – Regular City Council Meeting Agenda

Monday, June 3rd, 2019; 6:00 pm
Gridley City Hall, 685 Kentucky Street, Gridley, CA 95948

“Our purpose is to continuously enhance our community’s vitality and overall quality of life. We are committed to providing high quality, cost-effective municipal services and forming productive partnerships with our residents and regional organizations. We collectively develop, share, and are guided by a clear vision, values, and meaningful objectives.”

CALL TO ORDER - Mayor Johnson

ROLL CALL - Recording Secretary

PLEDGE OF ALLEGIANCE – Councilmember Zachary Torres

INVOCATION – Bishop Pono Nako, Church of Jesus Christ, Latter-Day Saints

PROCLAMATIONS – None

COMMUNITY PARTICIPATION FORUM - *Members of the public may address the City Council on matters not listed on the agenda. The City Council may not discuss nor take action on any community participation item brought forward by a member of the community. Comments are requested to be limited to three (3) minutes.*

CONSENT AGENDA – *Items on the Consent Agenda are considered routine and acted upon by one motion. Any Council member may request that an item be removed for separate consideration. The City Council may only make minor comments; otherwise the item should be removed from the Consent Agenda and placed as the first item(s) under “Items for Council Consideration”.*

1. City Council minutes dated May 20, 2019
2. Approval of Utilities Director Employment Agreement
3. Approval of 1) Resolution No. 2019-R-010: A Resolution of The City Council of The City of Gridley Pledging Revenues and Funds at Levels Sufficient to Meet Obligations to The State Water Board for The Gridley Waterline Replacement Project and 2) Resolution No. 2019-R-011: A Resolution of The City Council of The City of Gridley Adopting Obligations to Reimburse the State Water Board for Project Funds Provided for The Gridley Waterline Replacement Project
4. Review and Approval of Resolution No. 2019-R-012: A Resolution of The City Council of The City of Gridley Authorizing the City Administrator to sign the Federal Aid Master Agreement No. 03-5140F15 and Program Supplement No. F004 for Project CML-5140(006) on the City’s Behalf

PUBLIC HEARING – None

ITEMS FOR COUNCIL CONSIDERATION

5. City Council acceptance of Resolution No. 2019-R-013: A Resolution of The Gridley City Council Approving A Change in Street Names From “Industrial Park Drive” To “Hall Drive” And “Elaine Court” To “Paradise Way” Located in The City of Gridley Industrial Park
6. FY 2019-20 Annual Budget Public Presentation #2
7. Council Acceptance of the Pavement Management Program (PMP) Report

CITY STAFF AND COUNCIL COMMITTEE REPORTS - *Brief updates from City staff and brief reports on conferences, seminars, and meetings attended by the Mayor and City Council members, if any.*

POTENTIAL FUTURE CITY COUNCIL ITEMS - (Appearing on the Agenda within 30-90 days):

Adoption of Budget	6/17/2019
Approval of New Playground Equipment for Vierra Park	6/17/2019
Appointment of New Partial Term Councilmember	6/17/2019
Potential Cancellation of July 1 Council Meeting	6/17/2019
Appointment of Planning Commissioners	7/15/2019
Potential Cessation of Net Metering Program	7/15/2019

CLOSED SESSION - None

ADJOURNMENT – adjourning to the next regularly scheduled meeting on Monday, June 17th, 2019

NOTE 1: POSTING OF AGENDA- This agenda was posted on the public bulletin board at City Hall at or before 6:00 p.m., May 31st, 2019, in accordance with Government Code Section 54954.2. This agenda along with all attachments is available for public viewing online at www.gridley.ca.us and at the Administration counter in City Hall, 685 Kentucky Street, Gridley, CA.

NOTE 2: REGARDING UNSCHEDULED MATTERS – In accordance with state law, it shall be the policy of this Council that no action shall be taken on any item presented during the public forum or on unscheduled matters unless the Council, by majority vote, determines that an emergency situation exists, or, unless the Council by a two-thirds vote finds that the need to take action arose subsequent to the posting of this agenda.

Gridley City Council – DRAFT City Council Meeting Minutes

Monday, May 20th, 2019; 6:00 pm
Gridley City Hall, 685 Kentucky Street, Gridley, CA 95948

“Our purpose is to continuously enhance our community’s vitality and overall quality of life. We are committed to providing high quality, cost-effective municipal services and forming productive partnerships with our residents and regional organizations. We collectively develop, share, and are guided by a clear vision, values, and meaningful objectives.”

CALL TO ORDER

Mayor Johnson called the meeting to order at 6:00 p.m.

ROLL CALL

Councilmembers

Present: Johnson, Borges, Torres,
Absent: Williams
Arriving after roll call: None

Staff present:

Paul Eckert, City Administrator
Tony Galyean, City Attorney
Al Byers, Police Chief
Daryl Dye, Utilities Director
Jamie Norton, Fire Chief
Sean Norman, Fire Chief

PLEDGE OF ALLEGIANCE

Mayor Johnson led the Pledge of Allegiance.

INVOCATION

The invocation was provided by Pastor Branden Heskett of the Christian Life Church of Gridley.

PROCLAMATIONS – None

***NEW AND PROMOTED EMPLOYEES**

- Swearing in of Officer Devin Pasley

Chief Byers gave a brief overview of Officer Pasley’s background and administered the Oath. Officer Pasley’s parents pinned his badge.

COMMUNITY PARTICIPATION FORUM

CONSENT AGENDA

1. City Council minutes dated May 6th, 2019

2. Review and Approval of Resolution No. 2019-R-008: A Resolution of The City Council of The City of Gridley Approving the Attestation of Veracity for the 2018 Power Source Disclosure Report and Submission of The Report to The California Energy Commission
3. Opt-out of CalPERS for Non-Union Employees
4. Approval of Resolution No. 2019-R-009: A Resolution of The City Council of The City of Gridley Authorizing the City Administrator to Amend The 2019-20 Budget to Incorporate A List of Projects Funded by SB 1: The Road Repair and Accountability Act

Motion to approve the consent agenda by Councilmember Borges, seconded by Councilmember Torres

ROLL CALL VOTE

Ayes: Johnson, Borges, Torres

Motion passed, 3-0

PUBLIC HEARING – None

ITEMS FOR COUNCIL CONSIDERATION

5. Approval of New Playground Equipment for Vierra Park

This item was tabled until the next meeting on June 3, 2019.

6. FY 2019-20 Annual Budget Introduction

Administrator Eckert, Utilities Director Daryl Dye and Fire Chief Jamie Norton addressed Council with an overview of their department's budget for FY 19/20.

7. Council Appointment of Partial Term Councilmember

Staff received direction to set up interviews by means of a Special Council meeting at 5:15 p.m. on June 3rd.

8. Selection Process for Volunteer Planning Commissioners

Staff was advised to advertise the vacancies and use social media to notify the public of the vacancies. Interviews and appointments will be at a later Council meeting.

Motion to approve the suggested process by Councilmember Borges, seconded by Councilmember Torres.

ROLL CALL

Ayes: Torres, Borges, Johnson

Motion passed, 3-0

CITY STAFF AND COUNCIL COMMITTEE REPORTS

Mayor Johnson reported that he attended the Sutter Butte Flood Control Agency and the Butte County Mosquito and Vector Control District meetings.

POTENTIAL FUTURE CITY COUNCIL ITEMS - (Appearing on the Agenda within 30-90 days):

Budget presentation	6/3/2019
Adoption of Budget	6/17/2019
Potential Cancellation of July 1 Council Meeting	6/17/2019
Appointment of Planning Commissioners	7/15/2019
Potential Cessation of Net Metering Program	7/15/2019

CLOSED SESSION

9. Conference with Legal Counsel – Anticipated Litigation Re Claim of Patrick Blackshire – Pursuant to Government Code 54956.9
10. Conference with Labor Negotiators pursuant to Government Code 54957.6 to meet and confer with International Brotherhood of Electrical Workers and Gridley Police Officers Association
11. Government Code 54757 - Public Employee Performance Evaluation, Utilities Director

Council came out of closed session at 8:45 p.m. and announced the following action: Item #9, approve rejection of claim by Patrick Blackshire; Item #11, authorize staff to place item on next Council agenda.

ADJOURNMENT

With no items for further discussion, Council adjourned to the next regularly scheduled meeting on Monday, June 3rd, 2019

Paul Eckert, City Clerk

City Council Agenda Item #2
Staff Report

Date: June 3, 2019

To: Mayor and City Council

From: Paul Eckert, City Administrator

X	Regular
	Special
	Closed
	Emergency

Subject: Electric/Public Works Director Employment Agreement Approval

Recommendation

Staff respectfully requests that the Mayor and City Council approve and adopt the City Employment Agreement between the City of Gridley and Utilities Director Daryl Dye.

Background

Utilities Director Daryl Dye has worked for the City of Gridley since November 1985 when he started as a Public Works Maintenance Worker. The City Council appointed him as the Electric Department Director in July 2012. Mr. Dye agreed to take on the additional role of Public Works Director effective July 2016, resulting in very significant costs savings in excess of \$120,000 annually. Mr. Dye has served with distinction as both the Electric Utility Director and Public Works Director with both Departments operating more effectively and efficiently than ever before.

The City Council met to evaluate Mr. Dye during a recent Closed Session Council meeting. As follow-up to recent conversations, the City Administrator, working with the Mayor, has developed the attached Employment Agreement for City Council consideration. If approved, the contract will become effective July 5th and run through approximately October 31, 2020.

The attached Employment Agreement has been reviewed by our Finance staff. Overall, the contract will result in excess of \$103,000 of annual savings to the City's General Fund.

Fiscal Impact

The compensation of the Electric and Public Works Director position is included in the FY 2019/2020 Adopted Budget. The contract will result in excess of \$103,000 of annual savings to the City's General Fund. Additionally, the City will continue to realize an approximate savings of \$120,000 annually. Consequently, the total savings associated with this action is \$223,000.

Compliance with City Council Strategic Plan or Budget Goals

Selection of the most qualified staff possible is consistent with the City Council's commitment to attracting and retaining the most effective, customer focused workforce possible.

Attachment

City of Gridley Employment Agreement with Daryl Dye

City of Gridley
Employment Agreement
Electric/Public Works Director

This Employment Agreement (hereinafter called the “Agreement”) made and entered into on June 3, 2019, by and between the City of Gridley, California, a general law city, (hereinafter called the “City”) and Daryl Dye, Electric/Public Works Director (hereinafter called the “Employee”) with respect to employment as the Electric/Public Works Director of Gridley, California.

1. Appointment of the Electric/Public Works Director:

The City Council of the City of Gridley seeks to hire the Employee as the City’s Electric/Public Works Director to serve and perform such duties at such times and places and in such a manner as the City may from time to time direct. Furthermore, the City Council of the City of Gridley is the sole appointing body of the position of Electric/Public Works Director, as per the adopted City ordinance(s), resolution(s) and City policy manual.

2. At Will Employment:

Employee is an “at will” employee who shall serve at the pleasure of the City Council. Accordingly, the City Council may terminate Employee’s employment at any time, with or without cause. The provision may not be altered except by a written instrument by Employee, and formally approved by the City Council, which specifically references this Agreement and section.

3. Term of Agreement:

The Employee acknowledges that he serves in the position of Electric/Public Works Director at the discretion and pleasure of the Gridley City Council. The parties of this Agreement may terminate the Agreement pursuant to the provisions of paragraphs 6 and 7 below. Unless otherwise extended, this Agreement shall conclude no later than October 31, 2020. The City Council is expected to begin the search processes for the Electric and Public Works Directors in approximately March 2020.

4. Duties and Responsibilities:

- a) Employee shall serve as the Electric/Public Works Director of the City of Gridley and he shall be vested with the powers, duties and responsibilities set forth in the City’s adopted job description for Electric/Public Works Director and shall be responsible for directing, administering and coordinating the Electric and Public Works functions of the City of Gridley.
- b) Employee agrees to devote his productive time, ability and attention to the City business. For the duration of this Agreement, Employee shall not hold secondary employment, unless it is vocational training as it relates to his duties and cannot be done to encumber any City time, resources or facilities. The secondary employment must be so de minimis that it is transparent that it is for the continuing education of the Employee and to benefit the leadership and education of the Employee as the Electric/Public Works Director. The

de minimis secondary employment shall not constitute interference with or a conflict of interest with his responsibilities under the Agreement. The City Council shall be the sole body that authorizes any de minimis secondary employment.

5. Hours of Work:

It is recognized that the Employee must devote a great deal of time outside the normal office hours on business for the City, and to that end the Employee shall be allowed to establish an appropriate work schedule. The Employee will normally work 80 hours per (two week) pay period.

6. Performance Evaluation:

The City shall annually review the performance of the Employee subject to a process, form, criteria, and format for the evaluation which shall be mutually agreed upon by the City and Employee. The process at a minimum shall include the opportunity for both parties to: (1) prepare a written evaluation, (2) meet and discuss the evaluation, and (3) adopt an appropriate improvement plan and/or goals.

7. Termination of Employment and Severance:

- a) Per Section Two (2) of this Agreement – At Will Employment - Employee understands and acknowledges that Employee serves at the pleasure and discretion of the City Council and that Employee may be terminated at any time for any reason (or no reason at all) by the City Council. Except upon the event that the City terminates Employee's employment for reasons involving the alleged commission of a crime, the alleged commission of an act of moral turpitude, the alleged commission of any act constituting an abuse of Employee's public office under the laws of the State of California or the performance of an act of gross negligence (any of which shall be deemed as being reason(s) to terminate Employee's employment under this Agreement as being "for cause").
- b) In a like manner, nothing in this contract shall interfere with the right of the Employee to resign at any time. The employee shall give a minimum of a 30-day notice to terminate this Agreement. During such a notice period, all the rights and obligations of the parties under this agreement shall remain in full force and effect.

8. Compensation Benefits:

- a) Employee will be compensated under the criteria provided in the Governor's Executive Order B-57-18. (Attached Circular Letter from CalPERS). Employee shall be paid an hourly rate equal to his current base pay rate of \$76.52 an hour and will receive no benefits.
- b) The City Council shall retain the discretion to provide additional adjustments as it sees fit depending on the performance and accomplishment of Council objectives.

- c) Professional Memberships: Subject to approval by the City, the City agrees to provide for membership in any trade appropriate and position appropriate associations and/or organizations. The Employee is also authorized participation in two (2) conferences and meetings of organizations, which provide professional information to Employee relative to his performance as Electric/Public Works Director of the City of Gridley. Attendance and participation in any conference(s) or symposium(s) shall be subject to City Council approval, availability of funds and within the fiscal year's budget.
- d) Cell Phone Allowance: City agrees to provide a cell phone allowance to the Employee in an amount not to exceed seventy-five dollars (\$75) per month.

9. Notices:

Notices pursuant to this Agreement shall be given by depositing in the custody of the United States Postal Service, postage prepaid, addressed as follows:

The City: City Administrator
 685 Kentucky Street
 Gridley, CA 95948

Employee: Daryl Dye
 PO Box 93
 Biggs, CA 95917

Alternatively, notice required pursuant to this Agreement may be personally served in the same manner as is applicable to civil judicial practice. Notice shall be deemed given as of the date of personal service or as of the date of deposit of such written notice in the course of transmission in the United States Postal Service.

10. Other Terms and Conditions of Employment:

The City, only upon agreement with the Employee, shall fix any such other terms and conditions of employment, as it may determine from time to time, provided such terms and conditions are not inconsistent with or in conflict with the provisions of the Agreement, The Gridley Municipal Code, or any other law.

11. General Provisions:

This Agreement sets forth and establishes the entire understanding between the City and the Employee relating to the employment of the Employee by the City. Any prior discussions or representations by or between the parties are merged into and rendered null and void by this Agreement. The parties by mutual written agreement may amend any provision of this Agreement during the life of the Agreement. Such amendments shall be incorporated and made a part of this Agreement.

This Agreement shall be binding upon and inure to the benefit of the successors, assigns, heirs at law and personal representative of the Employee.

If any provisions, or any portion thereof, contained in this Agreement is held to be unconstitutional, invalid, or unenforceable, the remainder of this Agreement, or portion thereof, shall be deemed severable. Shall not be affected, and shall remain in full force and effect.

IN WITNESS WHEREOF, the City has caused this Agreement to be signed and executed on its behalf by its Mayor, and duly attested by person named below, and Employee has signed and executed this Agreement, on the day and year written below.

Employee:

Daryl Dye Date

For City of Gridley:

Bruce Johnson, Mayor Date

Approved as to Form:

Anthony E. Galyean Date
City Attorney

Attest:

Name Date

City Council Agenda Item #3
Staff Report

Date: June 3, 2019

To: Mayor and City Council

From: Paul Eckert, City Administrator

X	Regular
	Special
	Closed
	Emergency

Subject: Approval of 1) Resolution No. 2019-R-010: A Resolution of The City Council of The City of Gridley Pledging Revenues and Funds at Levels Sufficient to Meet Obligations to The State Water Board for The Gridley Waterline Replacement Project and 2) Resolution No. 2019-R-011: A Resolution of The City Council of The City of Gridley Adopting Obligations to Reimburse the State Water Board for Project Funds Provided for The Gridley Waterline Replacement Project

Recommendation

City staff respectfully recommends that the Mayor and City Council approve and adopt the Pledged Revenues and Funds Resolution and the Reimbursement Resolution for the Gridley Waterline Replacement Project funding Application submittal.

Background

As you may recall, the City Council on June 18, 2018 authorized Council Resolution No. 2018-R-013 approving the funding application for approximately 45,000 feet of 2-inch and 4-inch water main lines in need of replacement. The pipes are very old metal pipes, which do not provide adequate fire flows to hydrants, contribute to excessive water losses in the system, expose customers to substandard water quality, and contribute to lower pressures for customers. The City of Gridley qualifies for and is pursuing funding assistance through the State of California Water Quality Control Board (Water Board) Drinking Water State Revolving Fund (DWSRF) for design and construction of the Gridley Waterline Replacement Project. As part of the application process, the aforementioned resolutions are to be submitted to the Water Board to be eligible for funding assistance.

Financial Impact

The City is pursuing an SRF grant to fund the project

Compliance with City Council Strategic Plan or Budget Goals

The Gridley Waterline Replacement Project is part of the City's Capital Improvement Plan to provide and maintain reliable water service.

Attachments

Resolution No. 2019-R-010

Resolution No. 2019-R-011

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRIDLEY PLEDGING REVENUES AND FUNDS AT
LEVELS SUFFICIENT TO MEET OBLIGATIONS TO THE STATE WATER BOARD FOR THE GRIDLEY
WATERLINE REPLACEMENT PROJECT**

WHEREAS, The City of Gridley (the "Entity") proposes to pledge revenues and funds from the City's Water Fund to meet obligations to the State Water Board for the Gridley Waterline Replacement Project (the "Project"); and

WHEREAS, the Entity proposes a commitment to collect such revenues and maintain such funds throughout the term of financing and until the Entity has satisfied its repayment obligation thereunder unless modification or change is approved in writing by the State Water Resources Control Board; and

WHEREAS, the Entity proposes that the Entity's pledge hereunder shall constitute a lien in favor of the State Water Resources Control Board on the foregoing funds and revenues without any further action necessary; and

WHEREAS, the Entity proposes to maintain the funds and revenues at levels sufficient to meet its obligations under the financing agreement, so long as the financing agreement is outstanding.

WHEREAS, the City Council has made the following findings with respect to the Project:

1. The City of Gridley hereby dedicates and pledges revenues and funds from the Water Funds to payment of any and all Clean Water State Revolving Fund and/or Water Recycling Funding Program financing for the Project. The Entity commits to collecting such revenues and maintaining such funds throughout the term of such financing and until the Entity has satisfied its repayment obligation thereunder unless modification or change is approved in writing by the State Water Resources Control Board. So long as the financing agreements are outstanding, the Entity's pledge hereunder shall constitute a lien in favor of the State Water Resources Control Board on the foregoing funds and revenues without any further action necessary. So long as the financing agreements are outstanding, the Entity commits to maintaining the fund(s) and revenues at levels sufficient to meet its obligations under the financing agreements.

NOW THEREFORE, BE IT RESOLVED that the City Council does hereby pledge revenues and funds at levels sufficient to meet obligations to the State Water Board for project funds provided for the Gridley Waterline Replacement Project.

The foregoing Resolution was adopted by the City Council of the City of Gridley on the 3rd day of June 2019, by the following vote:

AYES: COUNCILMEMBERS

NOES: COUNCILMEMBERS

ABSENT: COUNCILMEMBERS

ABSTAIN: COUNCILMEMBERS

ATTEST:

APPROVED:

Paul Eckert, City Clerk

Bruce Johnson, Mayor

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRIDLEY ADOPTING OBLIGATIONS TO
REIMBURSE THE STATE WATER BOARD FOR PROJECT FUNDS PROVIDED FOR THE GRIDLEY
WATERLINE REPLACEMENT PROJECT**

WHEREAS, the City of Gridley ("the Agency") desires to finance the costs of constructing and/or reconstructing certain public facilities and improvements relating to its water and wastewater system, including certain treatment facilities, pipelines and other infrastructure (the "Project"); and

WHEREAS, the Agency intends to finance the construction and/or reconstruction of the Project or portions of the Project with moneys ("Project Funds") provided by the State of California, acting by and through the State Water Resources Control Board (State Water Board); and

WHEREAS, the State Water Board may fund the Project Funds with proceeds from the sale of obligations the interest upon which is excluded from gross income for federal income tax purposes (the "Obligations"), and

WHEREAS, prior to either the issuance of the Obligations or the approval by the State Water Board of the Project Funds the Agency desires to incur certain capital expenditures (the "Expenditures") with respect to the Project from available moneys of the Agency; and

WHEREAS, the Agency has determined that those moneys to be advanced on and after the date hereof to pay the Expenditures are available only for a temporary period and it is necessary to reimburse the Agency for the Expenditures from the proceeds of the Obligations.

WHEREAS, the City Council has made the following findings with respect to the Project:

1. The Agency hereby states its intention and reasonably expects to reimburse Expenditures paid prior to the issuance of the Obligations or the approval by the State Water Board of the Project Funds.
2. The reasonably expected maximum principal amount of the Project Funds is \$11,217,400.
3. This resolution is being adopted no later than 60 days after the date on which the Agency will expend moneys for the construction portion of the Project costs to be reimbursed with Project Funds.
4. Each Agency expenditure will be of a type properly chargeable to a capital account under general federal income tax principles.
5. To the best of our knowledge, this Agency is not aware of the previous adoption of official intents by the Agency that have been made as a matter of course for the purpose of reimbursing expenditures and for which tax-exempt obligations have not been issued.

6. This resolution is adopted as official intent of the Agency in order to comply with Treasury Regulation §1.150-2 and any other regulations of the Internal Revenue Service relating to the qualification for reimbursement of Project costs.
7. All the recitals in this Resolution are true and correct and this Agency so finds, determines and represents.

NOW THEREFORE, BE IT RESOLVED that the City Council does hereby adopt obligations to reimburse the State Water Board for project funds provided for the Gridley Waterline Replacement Project.

The foregoing Resolution was adopted by the City Council of the City of Gridley on the 3rd day of June 2019, by the following vote:

AYES: COUNCILMEMBER

NOES: COUNCILMEMBER

ABSENT: COUNCILMEMBER

ABSTAIN: COUNCILMEMBER

ATTEST:

APPROVED:

Paul Eckert, City Clerk

Bruce Johnson, Mayor

City Council Agenda Item #4
Staff Report

Date: June 3, 2019

To: Mayor and City Council

From: Paul Eckert, City Administrator

Subject: Review and Approval of Resolution No. 2019-R-012: A Resolution of The City Council of The City of Gridley Authorizing the City Administrator to sign the Federal Aid Master Agreement No. 03-5140F15 and Program Supplement No. F004 for Project CML-5140(006) on the City's Behalf

X	Regular
	Special
	Closed
	Emergency

Recommendation

City staff respectfully requests the City Council approve Resolution No. 2019-R-XXX authorizing the City Administrator to sign the Federal-Aid Master Agreement No. 03-5140F15 and Program Supplement No. F004 for Project CML-5140(006).

Background

Over the past three years the City Council and staff have renewed our efforts to aggressively invest in street and sidewalk maintenance and street and sidewalk capital projects. As part of that effort, the City has worked diligently to reestablish our grant funding application efforts.

We are pleased to report that our efforts are producing results. The Butte County Association of Governments (BCAG) has allocated Congestion Mitigation and Air Quality (CMAQ) Improvement Program Federal funds to the City of Gridley in the amount of \$160,000. These initial funds will be used to complete the necessary preliminary engineering & environmental review and prepare this project for much larger future Active Transportation Program (ATP) grant funding for the project's construction. The long-term proposed project will provide sidewalk gap closures and ADA ramp improvements along segments of Sycamore, Magnolia, Indiana, and Vermont streets.

The Project addresses existing gaps in active transportation facilities (sidewalks and ADA ramps) in central Gridley, with a focus on streets surrounding McKinley Elementary and Sycamore Middle School that serve as major routes for students walking to and from school. The Project closes gaps in pedestrian access within a disadvantaged community, creating safer routes for children walking to and from McKinley Elementary and Sycamore Middle schools.

Fiscal Impact

This recommendation will result in additional revenues \$160,000 to support the design of the long-term proposed project to provide sidewalk gap closures and ADA ramp improvements along segments of Sycamore, Magnolia, Indiana, and Vermont streets.

Compliance with City Council Strategic Plan or Budget Goals

This report is consistent with our efforts to comply with State requirements and to ensure that our community members are fully informed of all City activities and all budgetary and financial efforts.

Attachments

1. Resolution No. 2019-R-012
2. Federal-Aid Master Agreement No. 03-5140F15
3. Program Supplement No. F004

**RESOLUTION NO.
2019-R-012**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GRIDLEY AUTHORIZING THE CITY ADMINISTRATOR TO SIGN THE FEDERAL-AID MASTER AGREEMENT NO. 03-5140F15 AND PROGRAM SUPPLEMENT NO. F004 FOR PROJECT CML-5140(006) ON THE CITY'S BEHALF

WHEREAS, the Federal-Aid Master Agreement is in place to assist in the administration of reimbursable funds to the City; and,

WHEREAS, the Federal-Aid Master Agreement No. 03-5140F15 has been revised to incorporate various changes in the regulations and policies; and,

WHEREAS, to receive reimbursable funds under the revised Federal-Aid Master Agreement No. 03-5140F15, a City official is required to be formally authorized by the City Council to sign on the City's behalf.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Gridley does hereby authorize the City Administrator to execute the Federal-Aid Master Agreement No. 03-5140F15 and Program Supplement No. F004 for Project CML-5140(006) on the City's behalf.

I HEREBY CERTIFY that the foregoing resolution was introduced, passed, and adopted by the City Council of the City of Gridley at a regular meeting held on the 3rd day of June, 2019, by the following vote:

AYES: COUNCILMEMBERS

NOES: COUNCILMEMBERS

ABSTAIN: COUNCILMEMBERS

ABSENT: COUNCILMEMBERS

ATTEST

APPROVE

Paul Eckert, City Clerk

Bruce Johnson, Mayor

City Council Agenda Item #5
Staff Report

Date: June 3, 2019

To: Mayor and City Council

From: Paul Eckert, City Administrator

X	Regular
	Special
	Closed
	Emergency

Subject: City Council acceptance of Resolution No. 2019-R-013: A Resolution of The Gridley City Council Approving A Change in Street Names From “Industrial Park Drive” To “Hall Drive” And “Elaine Court” To “Paradise Way” Located in The City of Gridley Industrial Park

Recommendation

Staff respectfully requests the City Council Adopt Resolution No. 2019-R-013 approving a change in street names from “Industrial Park Drive” to “Hall Drive” and “Elaine Court” to “Paradise Way” located in the City of Gridley Industrial Park.

Discussion

The City Council preliminarily approved street name changes in the Industrial Park in April 2019. This Staff Report, including the attached Resolution, serves to formally enact those street name changes.

The final Industrial Park map, included Industrial Park Drive and Elaine Court. Now, the City has an opportunity to recognize the service of our former long-standing Councilmember, Frank Hall, and memorialize his efforts by changing “Industrial Park Drive” to “Hall Drive”. Additionally, the result of the population displacement due to the Camp Fire has resulted in the City of Gridley hosting many families who have survived that catastrophic event; therefore, staff proposes to change the road name from Elaine Court to Paradise Way.

Public Notice

A notice was advertised in advance of the hearing date, posted at City Hall, made available at the Administration public counter and placed on the City website for review. At the time this report was prepared, no comments had been received.

Financial Impact

There are no direct costs associated with this effort with the exception of the costs to produce new street signage.

Compliance with City Council Strategic Plan or Budget Goals

This recommendation is consistent with the City Council’s ongoing efforts to recognize the unselfish efforts of Gridley community members.

Attachment

Resolution No. 2019-R-013

**A RESOLUTION OF THE GRIDLEY CITY COUNCIL APPROVING A CHANGE IN STREET NAMES
FROM INDUSTRIAL PARK DRIVE TO HALL DRIVE AND ELAINE COURT TO PARADISE WAY
LOCATED IN THE CITY OF GRIDLEY INDUSTRIAL PARK**

WHEREAS, Government Code Section 34091.1 stipulates that whenever the legislative body finds that a name should be adopted for a city street, or, that the existing name of any city street should be changed, the legislative body may adopt a resolution designating a name for, or change the name of such street; and,

WHEREAS, the Gridley City Council conducted a public hearing on June 3, 2019, to consider a change of street names from “Industrial Park Drive” to “Hall Drive” and from “Elaine Court” to “Paradise Way” located in the City of Gridley Industrial Park; and,

WHEREAS, appropriate notice was provided prior to the regularly scheduled public hearing.

NOW, THEREFORE, BE IT RESOLVED:

1. The Gridley City Council changes the existing street name of “Industrial Park Drive” to “Hall Drive”; and,
2. The Gridley City Council changes the existing street name of “Elaine Court” to “Paradise Way”.

I HEREBY CERTIFY that the foregoing resolution was introduced, passed, and adopted by the City Council of the City of Gridley at a regular meeting held on the 3rd day of June, 2019 by the following vote:

AYES: COUNCILMEMBERS

NOES: COUNCILMEMBERS

ABSTAIN: COUNCILMEMBERS

ABSENT: COUNCILMEMBERS

ATTEST:

APPROVE:

Paul Eckert, City Clerk

Bruce Johnson, Mayor

City Council Agenda Item #6
Staff Report

Date: June 3, 2019

To: Mayor and City Council

From: Paul Eckert, City Administrator

Subject: FY 2019-20 Annual Budget Public Presentation #2

X	Regular
	Special
	Closed
	Emergency

Recommendation

City staff respectfully recommends that the City Council allow staff to provide detailed descriptions of the Proposed FY 2019-20 Annual Operating Budget and complete the Department budget presentations. No action is required at this time. It's expected that the City Council will provide input and suggested budget priorities.

Background

During the May 20, 2019, Regular City Council meeting, the Council reviewed Budget and CIP details and received Departmental Presentations covering Electric, Public Works (including parks, water, sewer, and streets), and the Fire Department.

As described in the Schedule below, the Council will receive additional details regarding the General Fund, Enterprise Funds, and the Special Revenue Funds and will receive the remaining Departmental presentations including Recreation, Police, Engineering, and the Finance and Administration Budgets.

Staff will present an overview of the critical issues facing Citywide fiscal solvency including the inadequate fund balances of the Water and Sewer Enterprise Funds. Staff will also present an overview of the budget process and the proposed changes, additions, and deletions discussed at various budget study sessions and special meetings.

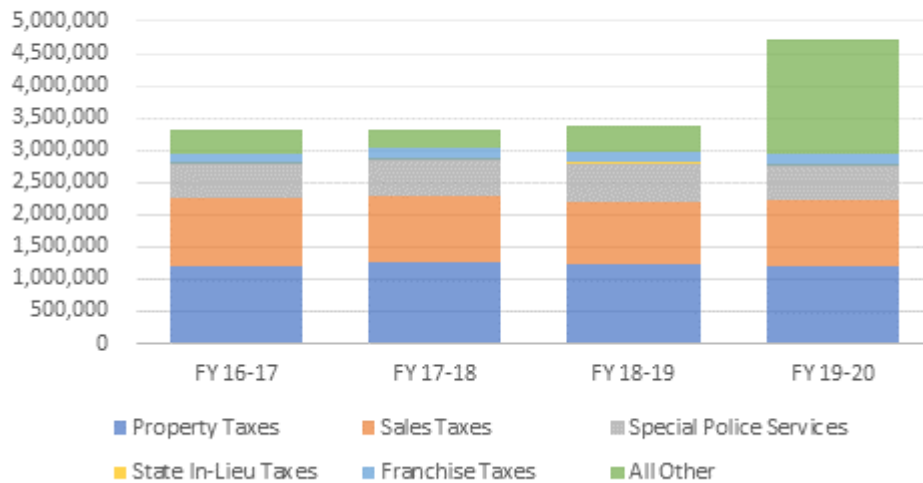
IMPORTANT COUNCIL MEETING DATES:

Budget Introduction Electric, Public Works, and Fire Presentations	5.20.2019
Revenues & Expenditures and Capital Plan Recreation, Police, Engineering, and Administration Presentations	6.3.2019
Budget Adoption	6.17.2019
Additional Dates if Required	6.24.2019

General Fund

The General Fund has maintained a positive fund balance for the past four budget cycles, following a series of deficit years. The majority of General Fund costs are comprised of personnel costs. Staff has undertaken significant measures in recent years to mitigate the fund challenges; including furloughs, layoffs, reduction of operating costs, deferment of projects, an implementation of an early retirement program, and an overall effort to relieve the burden on the City's General Fund.

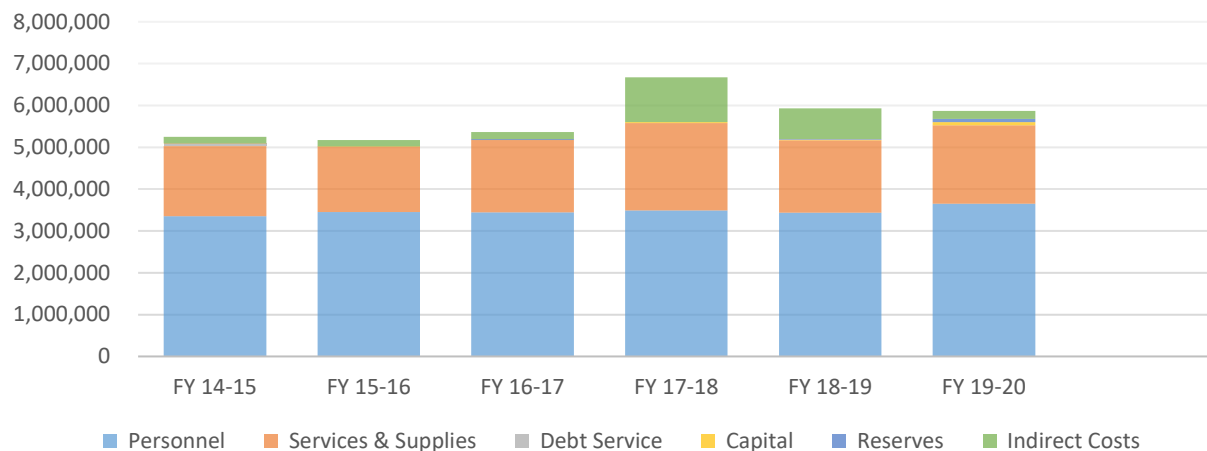
GENERAL FUND REVENUE TREND

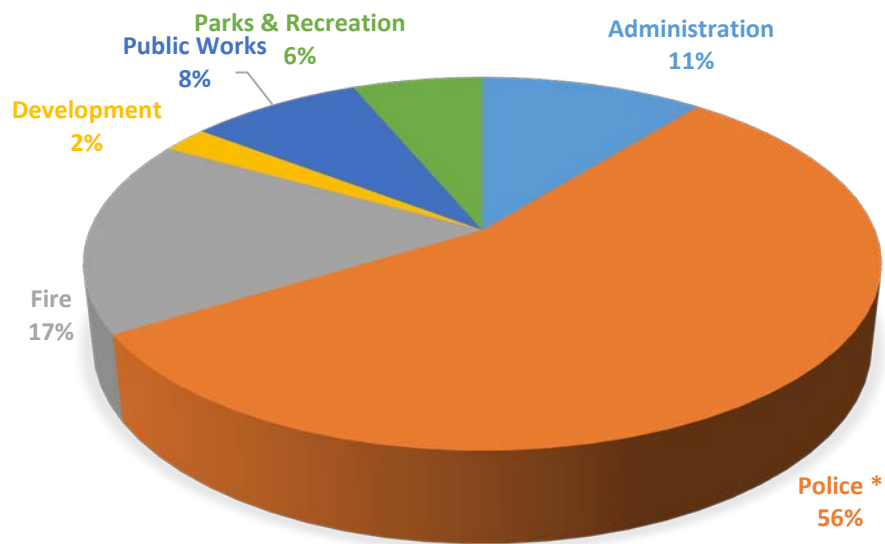


Revenue is expected to be at an all-time high due to the short-term lease revenues from the Gridley Camp Fire FEMA Community. In typical years, Property and Sales Tax contribute over 60% percent of revenue in the General Fund. It's essential to keep in mind that the FEMA revenues are for a period not to exceed two years.

Expenses in the General Fund are primarily flat. Increases are due to the Council approved addition of two Community Service Officers and the addition of one Firefighter. Additionally, the budget proposes increases to the Recreation Division budget, including employee benefits for the Recreation Coordinator. Overall personnel expenses are projected to increase primarily due to rises in Health Premiums and PERS Retirement. CalPERS estimates that local government costs could rise from 5 percent of payroll to 9 percent of payroll over the next five years. This is in addition to cost increases experienced thus far. Police and Fire (excluding the Biggs revenues) represent 72% of the General Fund budget.

GENERAL FUND EXPENDITURES TREND





GENERAL FUND EXPENDITURES 2019-20

*(EXCLUDING BIGGS)

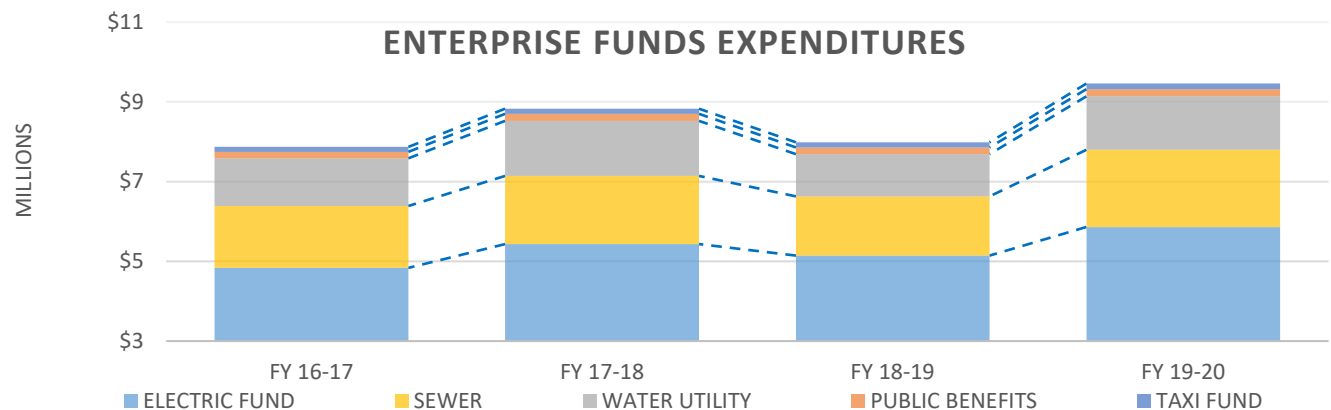
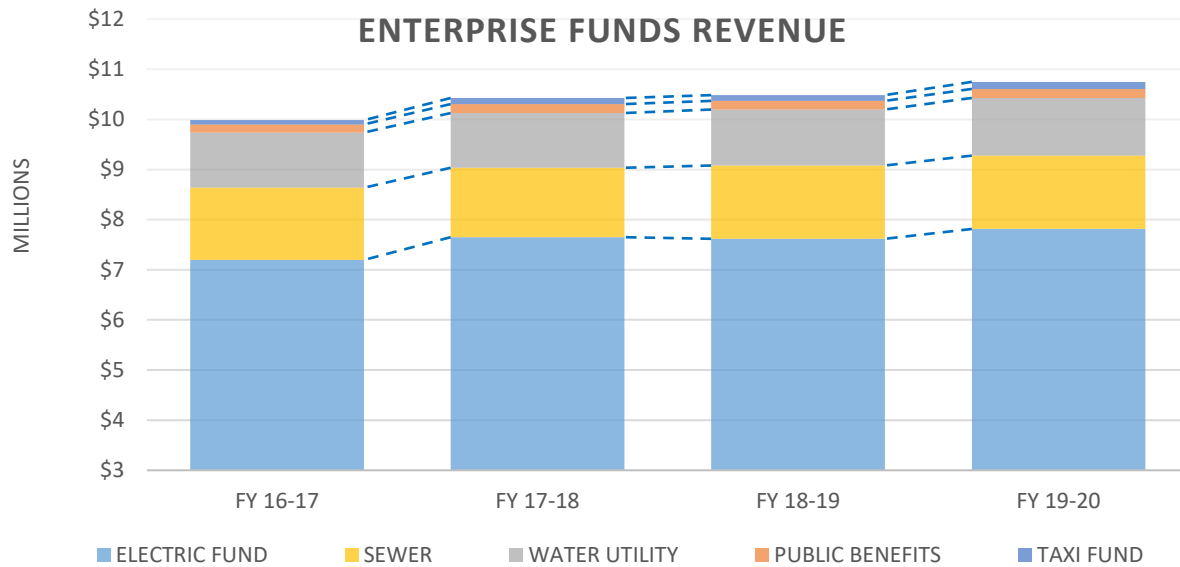
Overall, the proposed FY 2019-2020 budget improves the General Fund balance to \$1,232,105. After factoring in the required reserve balance level of 15%, the net General Fund balance is \$915,397.

Special Revenue Funds

The Special Revenue Funds are expected to fully utilize revenue for their designated purposes. The majority of the increase in anticipated revenue is due to an expected increase in the amount of Successor Agency funds for repayment of redevelopment expenditures. Both Revenue and Expenses reflect such increase in funds.

Enterprise Funds

Enterprise Funds Revenue is expected to increase by approximately 10% primarily due to the additional population of users due to the Gridley Camp Fire FEMA Community. Additionally, the Electric Fund revenues are generally improving due to the 2018 rate adjustment.



Enterprise Fund Expenditures are expected to increase, primarily driven by increases in Electric and Sewer Capital Improvements and increased costs of power purchases. In keeping with the Council commitments, the Electric Fund transfer to the General Fund decreased to \$1,200,000 from \$1,400,000 the prior year.

Significant Concerns

As discussed in the prior year budget sessions, the Water Fund and Sewer Fund are reaching alarmingly low fund levels. The proposed budget has already made reductions and postponements of much needed projects due to the low fund balances and unavailable funds. Operating expenses have remained relatively flat with increases coming primarily from personnel expenses in recent years; the declining deficit has been primarily due to the fact that the rate schedule has not been updated in many years. The fund balances are barely above deficit level, but it is dangerously close. While a water rate study was started in the prior fiscal year, it is crucial to complete the study and assess the accuracy of our water rates for long term viability. A sewer rate study is also now required.

Capital Improvement Program

Following a practice reinstated in the prior year budget, the Capital Improvements Program (CIP) was updated. For the CIP master plan, departments forecasted every vehicle, equipment, project, and improvement that meets internal capital criteria and planned the expenditures over 10 years in a methodical financial viability infrastructure plan. Throughout the budget process, staff vetted the importance of all requested CIP items against the available reserves and City priorities.

Conclusion

In conclusion, following the remarkable improvement in financial position in the last four years, the proposed budget adds discipline in expenditure reduction in all funds. This will be particularly important in the General Fund as we strive to meet reserve fund policy criteria and overall long-term viability. While the overall state of the Enterprise Funds is improving with the proposed budget, it's imperative that we address the critically low balance of the Water Fund and Sewer Fund of which the need for a rate study and assessment should be a top priority. Additionally, staff recommends review and implementation of adequate reserve fund policies to ensure the safety of City operations across all funds. From a budgetary perspective, determining sustainable solutions to these threats will be the number one priority of staff in FY 2019-20.

Fiscal Impact

The proposed FY 2019-20 budget is staff's comprehensive effort to present a policy document which preserves fiscal stability and at the same time enables staff to accomplish crucial projects and services. Adopting a proposed budget which enables a City to sustainably and efficiently provide services is one of the most important duties a City Council can participate in.

Compliance with City Council Strategic Plan or Budget Goals

The City Council and City staff are committed to provide the best possible financial practices and the highest possible transparency regarding all financial transactions.

Attachments – None

(The Budget and CIP will be hand delivered on Friday, May, 31st to the City Council.)

City Council Agenda Item #7
Staff Report

X	Regular
	Special
	Closed
	Emergency

Date: June 3, 2019

To: Mayor and City Council

From: Paul Eckert, City Administrator and Trin Campos, City Engineer

Subject: Council Acceptance of the Pavement Management Program (PMP) Report

Recommendation

Staff respectfully requests Council review and accept the Pavement Management Program (PMP) Report.

Background

During the past three years the City Council and staff have renewed our efforts to aggressively invest in street and sidewalk maintenance and street and sidewalk capital projects. Development of the attached Pavement Management Program (PMP) assists the Council and staff with prioritizing maintenance and capital improvement decisions. The PMP also greatly assists Gridley with competitive State grant funding applications.

Along with other local cities, the City entered into a contract with Harris & Associates in September 2018 to complete the City's Pavement Management Program. A copy of the final PMP Report is attached for your review. Harris & Associates worked closely with City staff to complete the following work tasks:

- Established the Street Saver Program for City Street Network & Pavement Database
- Completed Pavement Condition/Distress Site Survey
- Surveyed result data into Street Pavement Database
- Created the Pavement Condition Index (PCI) Calculation & Evaluation
- Developed City Budget Scenarios Analysis
- Added GIS Segmentation & Street Maps
- Trained City staff on the PMP & StreetSaver Program
- Provided a final PMP Report

As a part of the Budget and Capital Improvement Plan, the City Engineer will provide a short summary presentation of the PMP findings with the following key items:

- The City's current street pavement maintenance backlog is estimated at \$22 million.
- The average street network PCI is 40 (Scale: 100 is Excellent and 0 is Failed).
- The expected available City funds for pavement maintenance per year is \$300,000.00.
- The current PCI of 40 could be maintained with a funding level of \$1 million per year.
- The PCI could be improved from 40 to 71 with funding at \$2.25 million per year over 20 years.

The PMP/StreetSaver Program will allow City staff to evaluate the pavement maintenance options and strategies annually and make recommendations to the City Council for the most cost-effective use of the available pavement funds.

Fiscal Impact

There is no immediate fiscal impact related to the recommended action. Once accepted, the PMP will result in data driven street related expenditures decisions. City pavement maintenance and capital projects will be identified each fiscal year depending upon available funds. The City previously authorized funding of the PMP Report in the amount of \$30,855, utilizing Gas Tax Funds. Annual management fees to update report data and update the Street Saver on-line program updated is estimated at \$1,500, funded through Gas Taxes.

Compliance with City Council Strategic Plan or Budget Goals

This report is consistent with our efforts to: effectively maintain City street assets; prudently determine street expenditures; prepare the City for competitive State grant applications; and effectively communicate budgetary actions to our community members.

Attachments

Final PMP Report

City of Gridley

Final Report

2018-2019

Pavement Management

Program Update

May 15, 2019



Prepared by:



Harris & Associates SM



Harris & Associates

**Program Managers
Construction Managers
Civil Engineers**

May 15, 2019

Mr. Trin Campos
City of Gridley
685 Kentucky Street
Gridley, CA 95948

Subject: Final Report - Pavement Management Program Update

Dear Mr. Campos:

As part of the development of the Pavement Management Program for Gridley, Harris & Associates hereby submits the Final Pavement Management Report.

The information contained in this report presents the findings from a pavement condition survey of the City's street network. The City is also provided with the information that was used to develop the recommended improvement program. The report covers the following categories:

- Executive Summary of 2018-19 PMP Update
- Pavement Condition Index for all Streets
- Budget Analysis and Recommended Work Program based on various budgets
- Backup Data

It has been a pleasure working with you on this project. Do not hesitate to contact me at (925) 827-4900 ext. 1219 or vijay.pulijal@weareharris.com if you have any further questions.

Sincerely,

Harris & Associates

Vijay Pulijal, P.E.
Project Manager

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Appendix I – Pavement Condition Index & Remaining Service Life

Section PCI/(RSL) Listing Report
PCI Map

Appendix II - Budget Analysis Report

- A. Budget Needs Report – Twenty Years
- B. Average PCI by Annual Funding Chart
- C. Deferred Maintenance Cost Trend by Annual Funding Chart
- D. Budget Scenario Cost and Network Condition Summaries
- E. Annual Work Program I \$300K
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Appendix III - Backup Data

- A. Section Description Inventory Report
- B. Inventory of Applied Maintenance
- C. Maintenance Treatment Decision Trees

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EXECUTIVE SUMMARY

In November 2018, Harris & Associates updated the Pavement Management Program (PMP) for Gridley. For this update, about 29 centerline miles of streets were surveyed. The PMP provides a management tool to inventory street pavement, assess pavement condition, record historical maintenance, forecast budget needs, and view impacts of funding on citywide pavement condition over time.

The PMP is also a software-based tool for analyzing pavement conditions and recommending rehabilitation strategies based on funding levels. The software focuses on providing cost effective recommendations that enhance the overall system Pavement Condition Index (PCI)*. In general, asphalt concrete pavement deteriorates over time by both traffic loading and weathering. The Metropolitan Transportation Commission (MTC) software recommends that 14% of the budget be put to preventive maintenance treatments† such as surface seal or crack seals. The remaining budget is programmed for more expensive asphalt concrete overlays and reconstruction. Preventive maintenance treatments are important because they can sustain a street's PCI at a high level and at relatively low cost. Preventive maintenance treatments can be applied to many streets (large pavement area) with a positive effect of raising the system PCI for a fraction of the cost to overlay asphalt one street (small pavement area).

The City currently uses MTC's Pavement Management System StreetSaver® online version. The City uses the software to help make cost-effective decisions related to the street network, maximizing the City's return on investment from available maintenance and rehabilitation funds; generating a prioritized plan; and identifying specific areas in need of maintenance and rehabilitation.

For Gridley, the following six annual budget scenarios were generated with 14% of the annual budget applied towards preventative maintenance:

1. No Funds (\$0)
2. Expected Annual Budget I (\$300K)
3. Maintain PCI of 40 (\$900K)
4. Five Point Increase in PCI (\$1.1M)
5. Expected Annual Budget II (\$1M)
6. Unconstrained Budget (\$2.25M)

PURPOSE

The Pavement Management Program assists the City by providing current distress survey data used to evaluate current pavement condition. This helps to maintain a City-defined desirable level of pavement performance while optimizing the expenditure of limited fiscal resources. A PMP system is also required to obtain federal funds.

Specifically, the program provides administrators and maintenance personnel with:

* Calculated by an algorithm developed by the Army Corps of Engineers.

† Preventive maintenance is a schedule of planned maintenance actions aimed at the prevention of failure of streets. These actions are designed to detect, preclude, or mitigate degradation of a streets segment. The goal of a preventive maintenance approach is to minimize degradation and thus sustain or extend the useful life of the street.

- A current inventory of all public roadways
- The current pavement condition for all public roadways
- A project listing of all pavement needing maintenance, rehabilitation, or replacement
- The most cost effective level of maintenance or repair appropriate at the time of the survey
- A forecast of budget needs for maintenance, rehabilitation, or replacement of deficient pavement sections for a selected time period, at various alternative overall condition levels

NETWORK DESCRIPTION

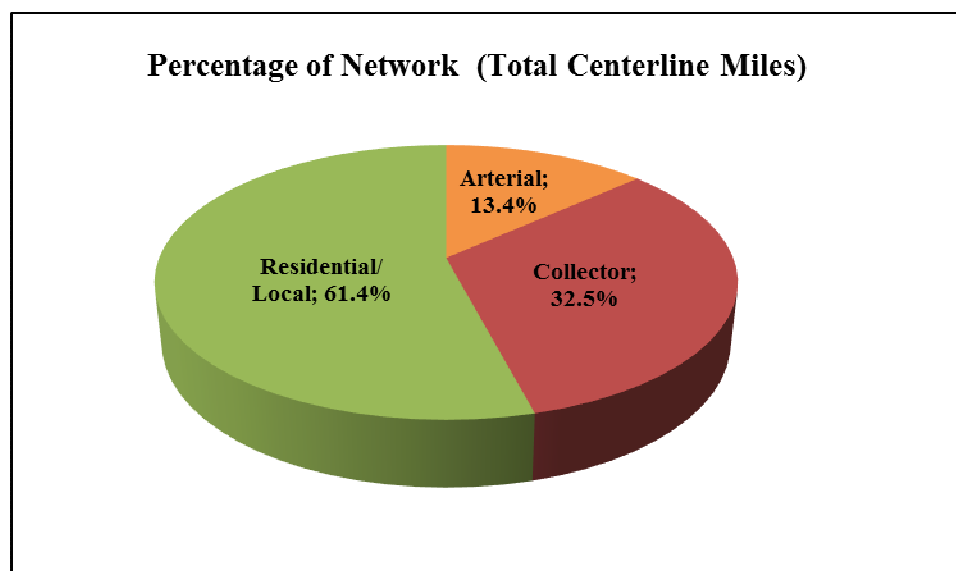
The entire pavement system within Gridley is composed of approximately 29 centerline miles of paved surfaces and is divided into 223 pavement management segments. To assist in planning maintenance needs, the City's streets were grouped by functional class (arterial, collector, and residential). Table 1 below shows the City's pavement mileage by functional class.

Table 1

Pavement Mileage by Functional Class					
Classification	Total Sections	Total Center Line Miles	Total Lane Miles	Percentage of Street Network	PCI
Arterial	20	3.87	7.75	13.4%	40
Collector	71	9.40	18.80	32.5%	41
Residential/Local	132	15.65	31.30	54.1%	39
Totals	223	28.92	57.85	100%	40

Figure 1 displays the percentage of each functional class in the overall network

Figure 1



The entire pavement system has a current reconstruction value of over \$54M. The current network reconstruction value (consisting of moderate base failure repair, removal of existing surface, and pavement overlay) by functional class is as follows:

Table 2

Network Reconstruction Value					
Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area (in SF)	Cost to Replace
Arterial	AC	7.75	\$9.06	901,575	\$8,164,000
Collector	AC	18.80	\$9.06	2,039,790	\$18,471,000
Residential/Local	AC	31.30	\$8.89	3,147,105	\$27,974,000
Grand Total		57.85		6,088,470	\$54,609,000

Table 2 provides network replacement cost sorted by Functional Class first and then by Surface Type. For each combination of Functional Class and Surface Type, the number of Lane Miles, Unit Cost (sq. ft.), Pavement Area (sq. ft.), and the Cost to replace (in thousands) is reported. The replacement cost is based on the Category V ("Very Poor") treatment cost provided in the Decision Tree for each functional class and surface type combination. Grand totals are provided at the bottom of applicable columns.

It is important to consider the overall investment the City has in its pavements. The unit cost to repair a street section in very poor condition (consisting of moderate base failure repair, removal of existing surface, and pavement overlay to reconstruction) is from \$8.89-\$9.06 per square foot or \$80.00-\$81.50 per square yard. The cost to reconstruct all Streets (Full replacement of the pavement, base, and structure of the Streets) is over \$54 million.

EXISTING PAVEMENT CONDITION

The PCI is an overall measure of the condition of the street surface based on a scale of zero (0) (failed) to one hundred (100) (excellent). The table below relates PCI ranges to general pavement condition definitions. Upon completion of this survey, a Pavement Condition Index (PCI) was calculated for each segment to reflect the overall pavement condition. Ranging between 0 and 100, a PCI of 0 would correspond to a badly deteriorated pavement with virtually no remaining life. A PCI of 100 would correspond to a new pavement or pavement with no observed distresses. The table below relates PCI ranges to general pavement condition definitions and gives a general description for each pavement condition

Table 3

PCI Breakdown Descriptions		
PCI Range	Condition	Description
90-100	Excellent	Little or no distress.
70-89	Very Good	Little or no distress, with the exception of utility patches in good condition, or minor to moderate hairline cracks; typically lightly weathered.
50-69	Good	Light to moderate weathering, light load-related base failure, moderate linear cracking.
25-49	Poor	Moderate to severe weathering, moderate levels of base failure, moderate to heavy linear cracking.
0-24	Very Poor	Extensive weathering, moderate to heavy base failure, failed patches, extensive network of moderate to heavy linear cracking.

The summary of all street condition data and the representative PCI's is located in the Pavement Condition Index Report in Appendix I.

The Citywide average Pavement Condition Index (PCI) is 40 on a zero to 100-point scale, with 100 being a new street. ‡PCIs for the City's pavement network is based on a visual distress rating system. The overall condition of Gridley's street network rests in the "Poor" range with a weighted average PCI of 40. The MTC State of Repair report states, "Approximately 75 percent of a pavement's serviceable life has been expended by the time its PCI rating falls to 60." Gridley's average PCI condition value by street classification is as follows in Table 4:

Table 4

PCI By Functional Class	
CLASSIFICATION	PCI
Arterial	40
Collector	41
Residential	39
Overall Network	40

‡Note: PCI weighted by area.

The following Figure 2 shows the City’s total pavement mileage by condition.

Figure 2

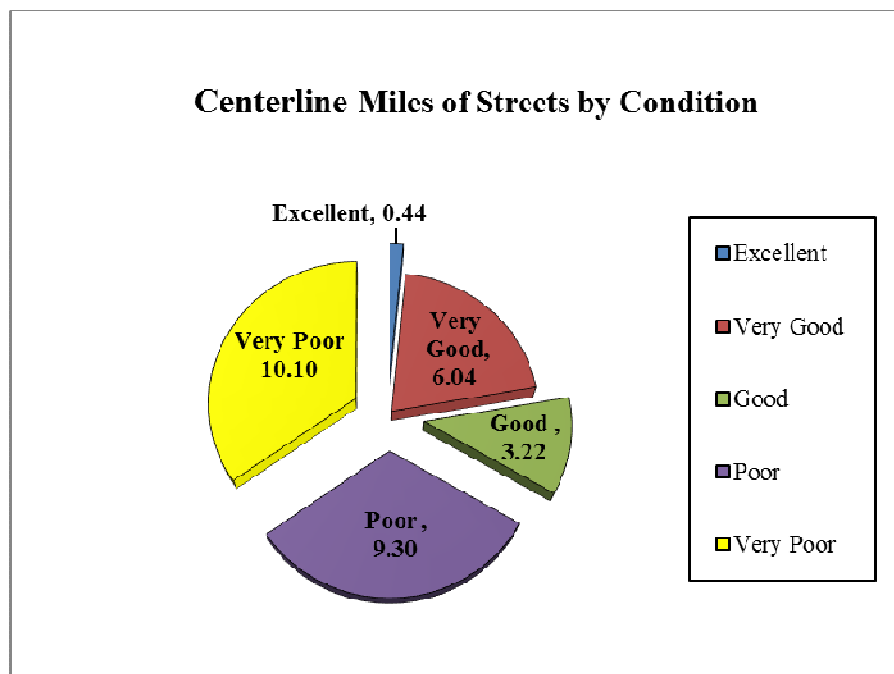
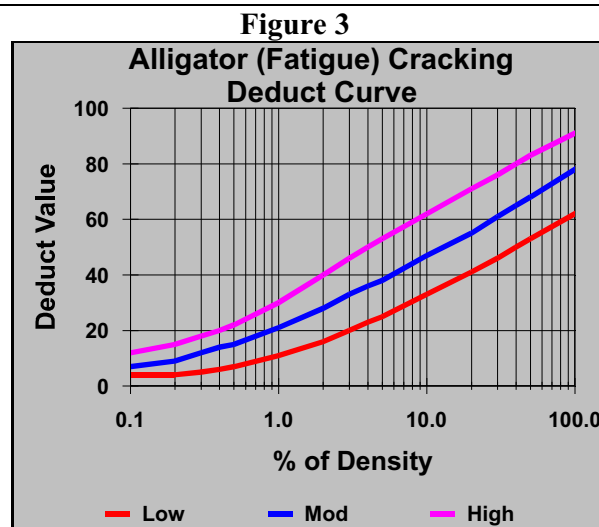


Table 5 breaks down the percentage of streets (by area) in each condition category by functional class. About 20% of the City streets are in the “Excellent” & “Very Good” condition category and about 10% fall in the “Good” condition category. About 34% fall in the “Poor” category and about 36% fall in the “Very Poor” category.

Table 5

Percentage of Network Area by Functional Class and Condition Category					
Condition Class	PCI Range	Arterial	Collector	Residential	Total
Excellent/Very Good (I)	70-100	1.25%	6.81%	11.86%	19.92%
Good/Fair (II)	50-69	0.30%	4.68%	4.92%	9.90%
Poor (IV)	25-49	10.89%	11.53%	12.07%	34.49%
Very Poor (V)	0-24	2.37%	10.48%	22.84%	35.70%
Totals		14.81%	33.50%	51.69%	100.00%

After the data entry procedures were completed, a distress rating was calculated for each segment. The distress rating is calculated using MTC developed algorithms. The algorithm assigns each pavement section a score of 100 then deducts point values based on the pavement distresses found within the section weighted by the quantity of each distress. The algorithm assigns deduct values based on the severity and the density of each distress. Figure 3 below is an example of the alligator cracking distress deduct curve.



The algorithm weighs the total deduct value within a section and calculates a total distress rating between 0 (failed) and 100 (excellent).

PAVEMENT MANAGEMENT STRATEGIES

A visual survey of approximately 29 miles of the City's Streets was conducted to assess the existing surface condition of each individual pavement segment. Data, including distress types and quantities, segment length and width, etc. were collected for all surveyed streets. Using a combination of city street and online maps to collect field information, a field crew visually surveyed each of these streets. Data was categorized by street and "pavement" segment. Pavement segment limits were identified by determining the logical maintenance practices that would apply to each street and may vary from street to street, i.e. intersection to intersection, change in pavement width, drainage conditions, crown of the roadway, etc. All survey data was entered into the MTC pavement management software (StreetSaver® Online Version 9.0)

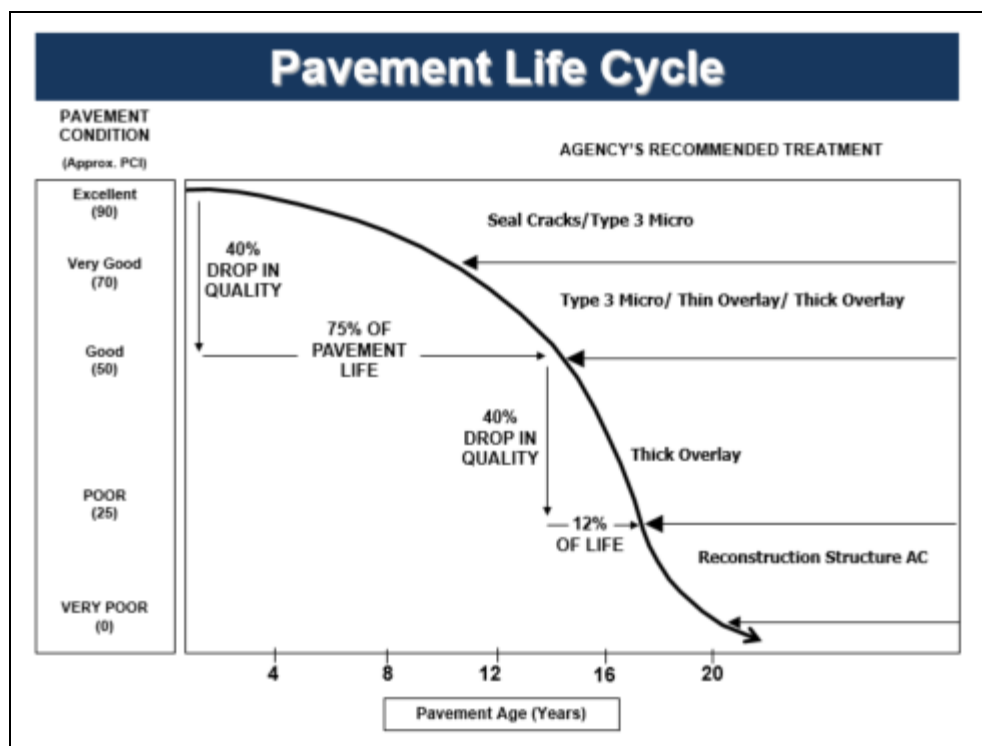
Once the PCI has been established for a pavement section, budget analyses and workload predictions commence. Predictions of future pavement performance are based on a pavement deterioration curve developed by MTC. As a pavement ages, the system predicts the PCI of the pavement based on the deterioration curve.

Pavement generally deteriorates according to a certain pattern. Figure 4 below is a model of this pattern, shown as a graph of pavement condition versus time. Please note that this figure is not to scale. A Street's pavement begins its life in excellent condition and remains in excellent condition for a few years, without need of any maintenance. Over time, however, the condition of the street will worsen, and the rate at which its pavement condition deteriorates* will increase dramatically as the street passes the midpoint of its life. As a result of this continued deterioration, the quantity and cost of the maintenance activities needed to rehabilitate the pavement will increase in both scope and costs. It is at this point that pavement repair options must be weighed.

* A typical pavement section will deteriorate 40% in the first 75% of its lifespan. However, that same pavement section, if untreated, will experience another 40% reduction in overall quality in only the next 12% of lifespan, effectively deteriorating an equivalent amount in only one-sixth (1/6) of the time.

Figure 4

PAVEMENT MANAGEMENT – APPLYING A COST EFFECTIVE TREATMENT



Questions must be answered, such as: will the investment related to a preventive maintenance repair be offset by the opportunity cost of not doing such a repair, or is the pavement in such a state that it would be better to simply wait until the pavement completely deteriorates before making the repair? The answers (and, indeed, the questions themselves) depend upon the individual pavement segment. Figure 4 illustrates the benefit of addressing pavement concerns before the pavement condition reaches a poor or failed state. Maintenance activities increase the PCI value as they are applied to the segment. By allowing pavements to deteriorate, streets that once cost \$3.50 per square yard (\$/SY) to microsurface may soon cost \$27.00-\$34.00/SY to overlay or \$80.00-\$81.50/SY to reconstruct. In other words, delays in repairs can result in costs increasing as much as 30-fold. It is not simply “pay today or pay tomorrow”, but rather a “pay today or pay more tomorrow” proposition. Overall pavement maintenance cost is reduced by the timely application of crack seals and slurry seals before the subgrade fails and requires a total pavement reconstruction.

Table 6 describes the condition categories, their equivalent PCI range, and typical prescribed maintenance treatments:

Table 6

Agency's Maintenance Treatments By Condition Category		
Condition	PCI Range	Typical Maintenance Treatment
Excellent	90-100	Do Nothing.
Very Good	70-89	Seal Cracks/ Type 3 Micro
Good	50-69	Type 3 Micro/ Thin Overlay
Poor	25-49	Thick Overlay
Very Poor	0-24	Reconstruct Structure

Table 6 created by Harris & Associates based on feedback from the City.

The maintenance strategy described above is based on PCI scores and the corresponding condition category. Streets with PCI scores over 90 are considered to be in excellent condition and require no treatment. Streets with scores from 70 to 89 are considered “Very Good”, but may require cracks to be sealed, type 3 microsurface. Streets with scores from 50 to 69 are considered “Good,” but may require a type 3 microsurface or thin AC overlay. Streets with scores from 25 to 49 are considered “Poor” and generally require a thick overlay. Streets with scores below 25 are “Very Poor” and are in need of a structure reconstruction. In the present condition less than a mile of the City’s pavement segments are in the “Excellent” category, about 6 centerline miles in the “Very Good” category, about 3 centerline miles in the “Good” category, about 9 centerline miles in the “Poor” category, and about 10 miles of streets are in the “Very Poor” category.

BUDGET NEEDS

Following the treatment strategy described in Table 6 and an inflation rate of 3%, the MTC PMP software generates a Budget Needs analysis. The Budget Needs analysis projects the total budget needed to bring the City’s pavement system to a condition where most pavement sections require only preventive maintenance (i.e., PCI = 70 or higher). It is cost effective to keep pavement segments above a certain PCI because the cost to maintain a high PCI is less than to bring a street segment with a low PCI to a high PCI.

The Budget Needs Average is defined as the cumulative budget needs over the course of the analysis period (\$44 million) divided by the number of years in the analysis period (20 years). For this study, the Budget Needs Average is \$2.25 million per year. After the Budget Needs have been calculated, Budget Scenarios are run to determine the funding levels required to maintain and/or improve the current PCI level and generate a list of street maintenance for the next five (5) years. The software analyzes each pavement section and selects a specific maintenance treatment, including do nothing, to maximize the improvement of the entire pavement system. Maintenance treatments are allocated to as many Streets as the annual budget will allow. The budget scenarios tested were calculated utilizing a 14% fixed preventative-maintenance-split, 3% interest, and 3% inflation values.

Using the StreetSaver budget needs module, maintenance needs over the next twenty years were estimated at approximately \$44M for the City. The results of the budget needs analysis are summarized in Table 7 below.

Table 7

Budget Needs Analysis				
Year	PCI Treated	Preventative Maintenance (\$M)	Rehab (\$M)	Total Needs (\$M)
2019	78	0.255	21.828	22.083
2020	80	0.000	4.570	4.570
2021	84	0.020	5.024	5.044
2022	85	0.006	2.559	2.565
2023	86	0.008	1.916	1.925
2024	86	0.002	1.145	1.147
2025	85	0.045	0.006	0.052
2026	85	0.429	0.023	0.452
2027	86	0.848	0.013	0.861
2028	86	0.499	0.042	0.491
2029	84	0.188	0.000	0.188
2030	83	0.202	0.000	0.202
2031	83	0.113	0.000	0.113
2032	82	0.221	0.079	0.300
2033	82	0.410	0.261	0.671
2034	81	0.356	0.016	0.373
2035	83	1.090	0.001	1.092
2036	82	0.272	0.032	0.305
2037	82	1.017	0.000	1.017
2038	80	0.329	0.000	0.329
Totals	N/A	6.268	37.522	43.791

Preventative Maintenance (PM) is a schedule of planned maintenance actions aimed at the prevention of failure of streets. These actions are designed to detect, preclude, or mitigate degradation of a street section. The goal of preventative maintenance approach is to minimize degradation and thus sustain or extend the useful life of the street. To reach that level of preventive maintenance in twenty (20) years, the Budget Needs analysis determined a total need of approximately \$44 million for the years 2019-2038. See Appendix I -A for the Needs - Projected PCI/Cost Summary

The MTC PMP software recommends spending 14% of the budget toward preventive maintenance because it is the optimum level according to the specific conditions of the City's system. This means that 14% of the annual budget is spent on crack seals and type 3 micro while the remainder of the budget is spent on overlays and reconstruction. These budgets do not account for stopgap maintenance repairs, such as emergency pothole repair.

BUDGET ANALYSIS/SCENARIOS

After the MTC PMP software analyzes the pavement system according to the specified annual budget over a period of twenty (20) years, trends are evident in the PCI and deferred maintenance backlog (the amount of necessary reconstruction and overlays not performed each year due to budget constraints). An increase in deferred maintenance shows that necessary rehabilitation is not being performed. The total deferred maintenance in 2019 before any suggested maintenance is performed is about \$22 million.

Deferred maintenance consists of pavement maintenance that is needed but cannot be performed due to lack of funding. Shrinking budgets have forced many agencies to defer much needed street maintenance. Deferring maintenance not only increases the frequency of resident complaints about the network condition, but also increases the costs to repair the streets. It is cost effective to keep the pavement above a certain PCI because the cost to maintain a high PCI is less than the cost to bring a street segment with a low PCI to a high PCI.

For Gridley, the following six annual budget scenarios were generated with 14% of the annual budget applied towards preventative maintenance:

1. No Funds (\$0)
2. Expected Annual Budget I (\$300K)
3. Maintain PCI of 40 (\$900K)
4. Five Point Increase in PCI (\$1.1M)
5. Expected Annual Budget II (\$1M)
6. Unconstrained Budget (\$2.25M)

In developing an annual expenditure level required to maintain the street network at its current

The following terms are defined for this sub-section:

“Year” – Year of the program

“Budget” – The projected budget for the given year

“Work Program” – The amount of money programmed to be expended, not to exceed the budget, based on the pavement maintenance needs as prioritized.

“Deferred” or **“Deferred Maintenance”** – The amount of money project for pavement maintenance that cannot be performed due to the lack of funding. The total pavement maintenance needs less the work program.

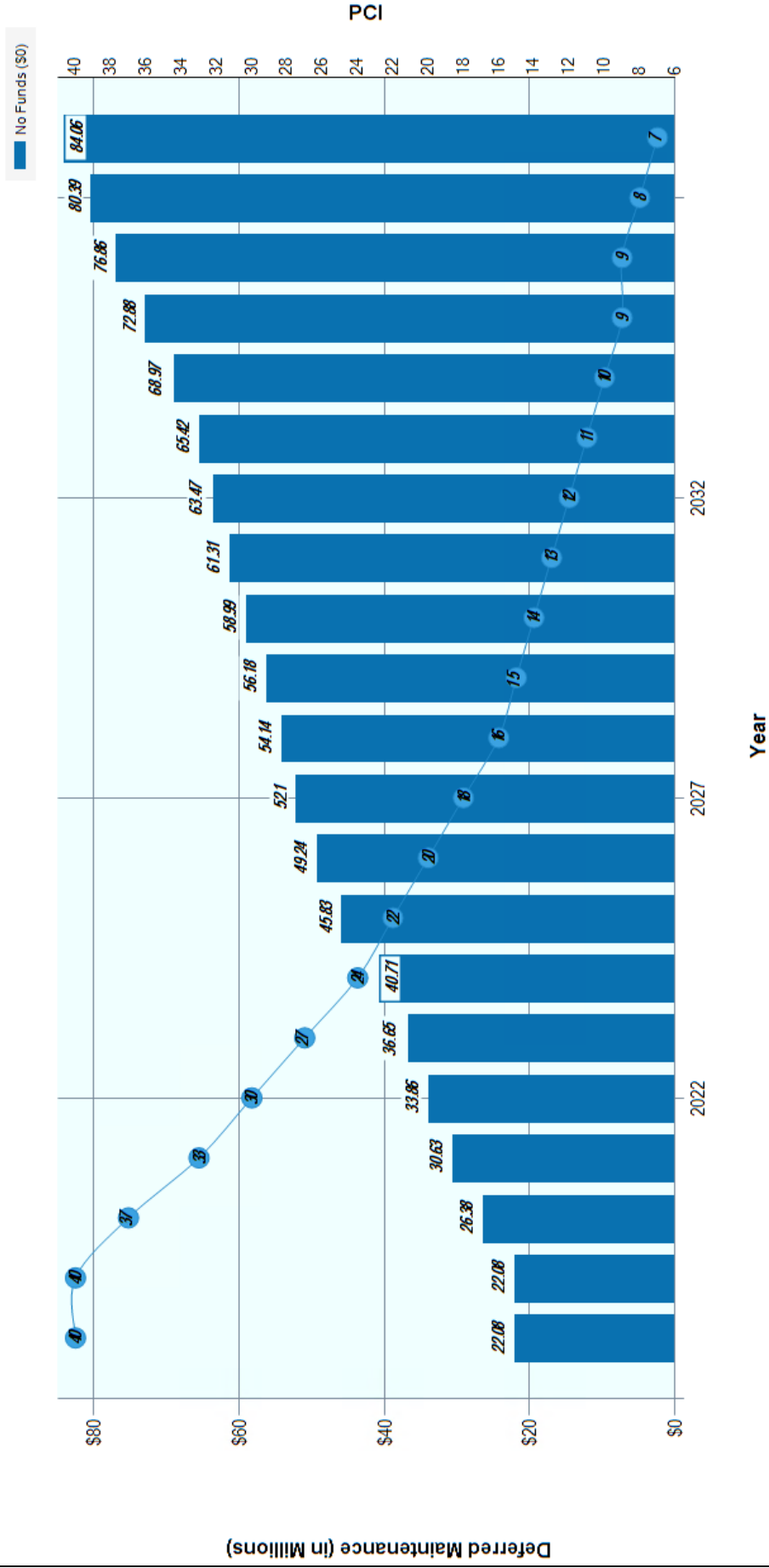
“Average Condition” – The projected average pavement Condition Index after completion of the Work Program.

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No Funds (\$0) - If the City spent no money over the next 20 years on pavement maintenance needs, the amount of deferred maintenance (or “backlog”) citywide would increase from \$22 million to \$84 million and the citywide average pavement condition index would decreased from 40 to 7.

No Funds (\$0)				
Year	Budget	Work Program	Deferred Maintenance	Average Network PCI
2019 (Prior to Treatment)			\$22,083,857	40
2019	\$0	\$0	\$22,083,857	40
2020	\$0	\$0	\$26,382,599	37
2021	\$0	\$0	\$30,625,376	33
2022	\$0	\$0	\$33,864,763	30
2023	\$0	\$0	\$36,649,041	27
2024	\$0	\$0	\$40,707,843	24
2025	\$0	\$0	\$45,832,060	22
2026	\$0	\$0	\$49,244,445	20
2027	\$0	\$0	\$52,099,647	18
2028	\$0	\$0	\$54,136,885	16
2029	\$0	\$0	\$56,177,886	15
2030	\$0	\$0	\$58,992,358	14
2031	\$0	\$0	\$61,309,750	13
2032	\$0	\$0	\$63,468,003	12
2033	\$0	\$0	\$65,424,399	11
2034	\$0	\$0	\$68,968,403	10
2035	\$0	\$0	\$72,878,832	9
2036	\$0	\$0	\$76,859,184	9
2037	\$0	\$0	\$80,391,067	8
2038	\$0	\$0	\$84,056,254	7

Scenario Comparison - Deferred Maintenance and PCI



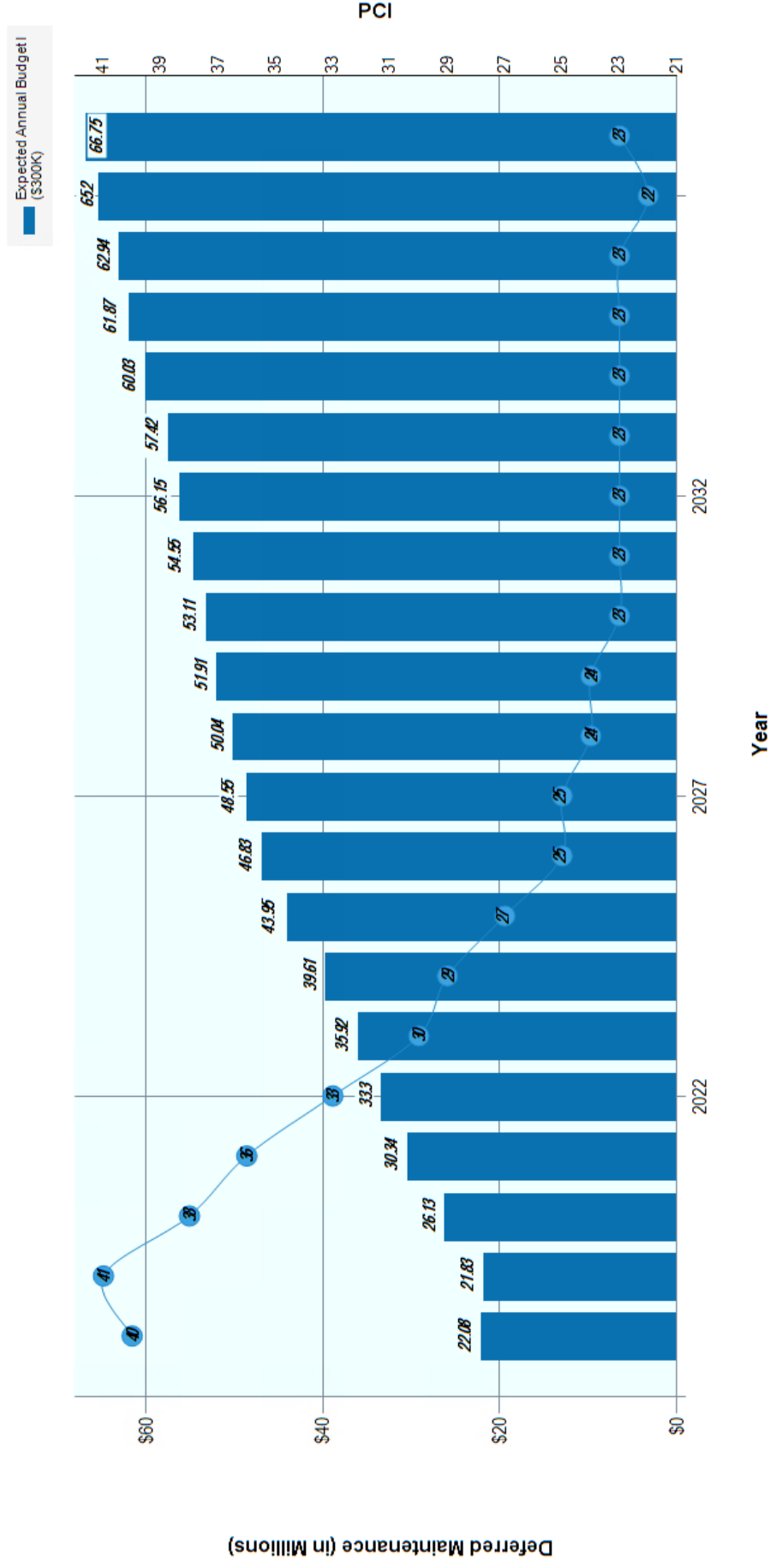
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Expected Annual Budget (\$300K) – At the Agency’s current expected maintenance budget over the next 20 years, spending \$300K, the amount of deferred maintenance citywide would increase from \$22M in 2019 (prior treatment) to \$63M in 2038.

Expected Annual Budget I (\$300K)				
Year	Budget	Work Program	Deferred Maintenance	Average Network PCI
2019 (Prior to Treatment)			\$22,083,857	40
2019	\$300,000	\$249,886	\$21,833,974	41
2020	\$300,000	\$257,691	\$26,131,683	38
2021	\$300,000	\$250,855	\$30,337,837	36
2022	\$300,000	\$274,838	\$33,298,594	33
2023	\$300,000	\$278,788	\$35,921,811	30
2024	\$300,000	\$229,480	\$39,611,694	29
2025	\$300,000	\$256,462	\$43,949,907	27
2026	\$300,000	\$230,629	\$46,830,479	25
2027	\$300,000	\$263,688	\$48,545,237	25
2028	\$300,000	\$275,506	\$50,043,381	24
2029	\$300,000	\$238,776	\$51,906,908	24
2030	\$300,000	\$245,972	\$53,109,856	23
2031	\$300,000	\$240,503	\$54,545,872	23
2032	\$300,000	\$261,969	\$56,146,390	23
2033	\$300,000	\$275,612	\$57,421,058	23
2034	\$300,000	\$231,403	\$60,027,416	23
2035	\$300,000	\$207,971	\$61,874,198	23
2036	\$300,000	\$238,148	\$62,944,004	23
2037	\$300,000	\$257,543	\$65,198,464	22
2038	\$300,000	\$269,186	\$66,751,033	23

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Scenario Comparison - Deferred Maintenance and PCI

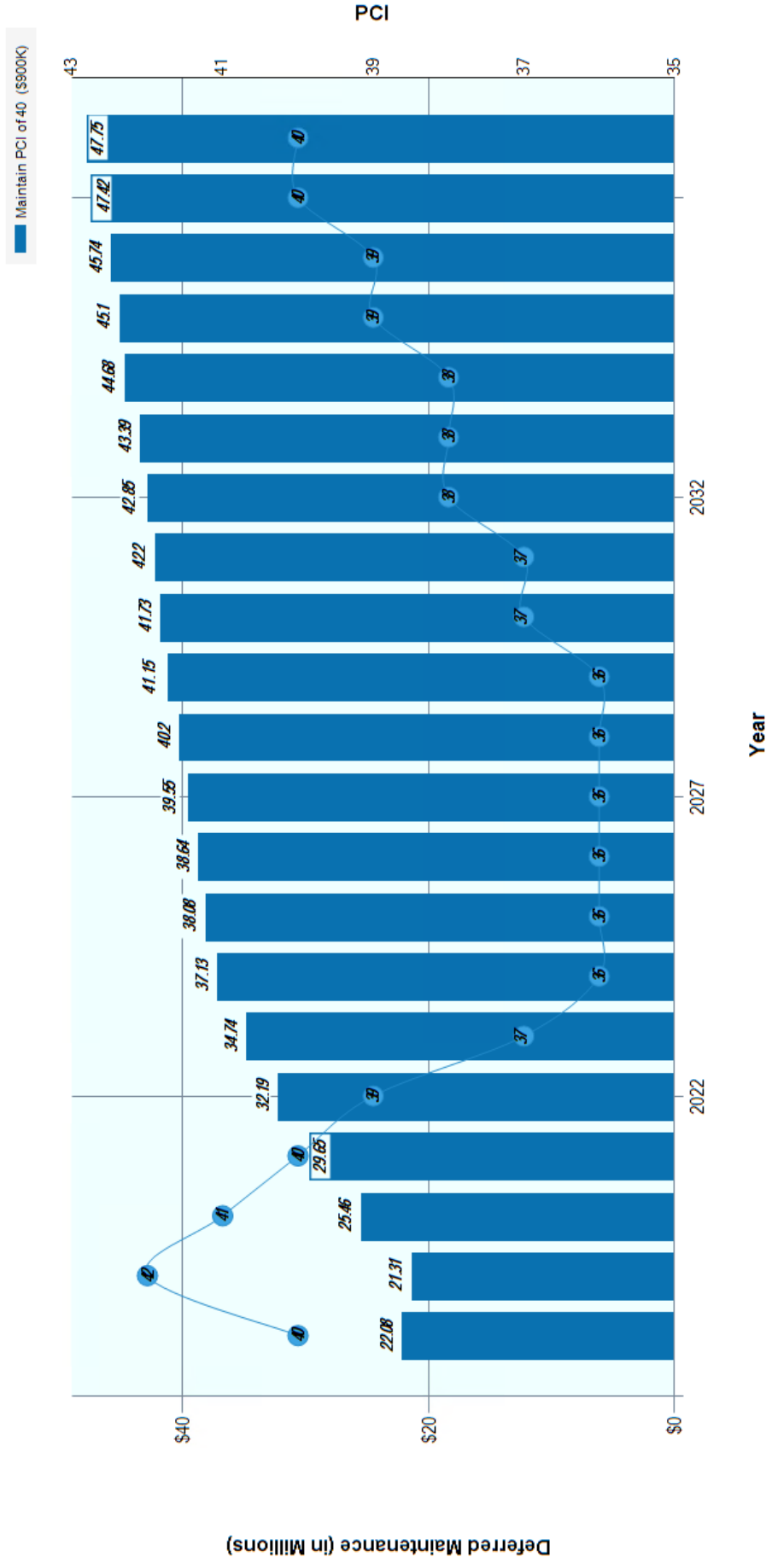


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Maintain PCI of 40 (\$900K) – In order to maintain the network average PCI at 40 or above over the next 20 years, approximately \$900K per year would need to be budgeted and the average amount of deferred maintenance would be about \$48M.

Maintain Current PCI of 40 (\$900K)				
Year	Budget	Work Program	Deferred Maintenance	Average Network PCI
2019 (Prior to Treatment)			\$22,083,857	40
2019	\$900,000	\$773,589	\$21,310,272	42
2020	\$900,000	\$857,190	\$25,456,312	41
2021	\$900,000	\$853,370	\$29,648,572	40
2022	\$900,000	\$875,981	\$32,191,489	39
2023	\$900,000	\$769,384	\$34,741,939	36
2024	\$900,000	\$758,061	\$37,128,151	36
2025	\$900,000	\$796,151	\$38,075,620	36
2026	\$900,000	\$774,520	\$38,641,057	36
2027	\$900,000	\$868,112	\$39,554,246	36
2028	\$900,000	\$805,339	\$40,199,535	36
2029	\$900,000	\$735,606	\$41,148,911	36
2030	\$900,000	\$850,308	\$41,725,768	37
2031	\$900,000	\$846,278	\$42,195,456	37
2032	\$900,000	\$864,915	\$42,851,806	38
2033	\$900,000	\$819,620	\$43,388,876	38
2034	\$900,000	\$761,069	\$44,680,824	38
2035	\$900,000	\$838,217	\$45,099,824	39
2036	\$900,000	\$838,268	\$45,736,810	39
2037	\$900,000	\$848,502	\$47,421,181	40
2038	\$900,000	\$829,138	\$47,748,491	40

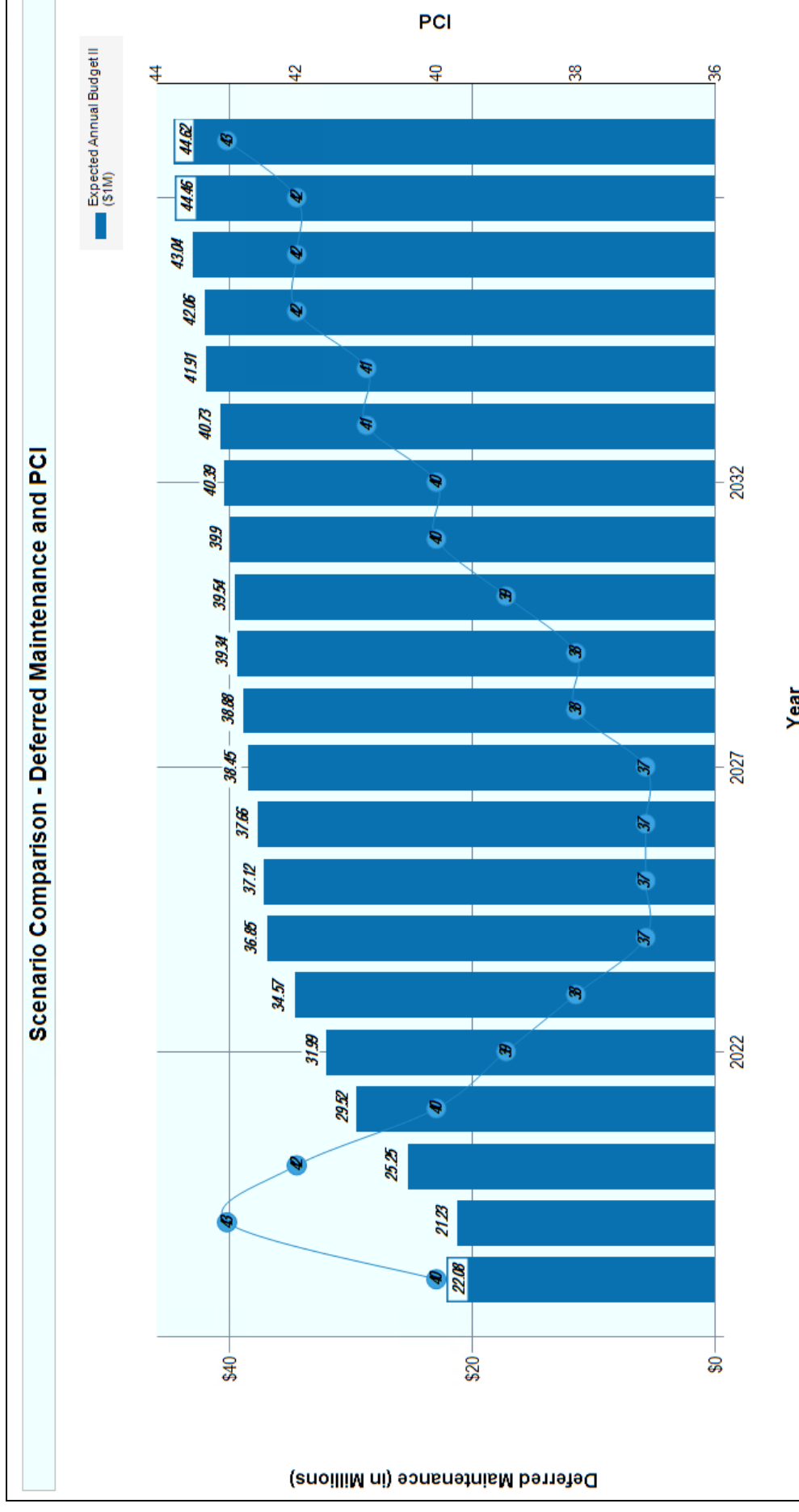
Scenario Comparison - Deferred Maintenance and PCI



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Expected Annual Budget II (\$1M) – At the Agency’s current expected maintenance budget over the next 20 years, spending \$1M, the amount of deferred maintenance citywide would increase from \$22M in 2019 (prior treatment) to \$44M in 2038.

Expected Annual Budget II (\$1M)				
Year	Budget	Work Program	Deferred Maintenance	Average Network PCI
2019 (Prior to Treatment)			\$22,083,857	40
2019	\$1,000,000	\$857,354	\$21,226,508	43
2020	\$1,000,000	\$958,692	\$25,254,032	42
2021	\$1,000,000	\$952,692	\$29,523,651	40
2022	\$1,000,000	\$944,785	\$31,994,032	39
2023	\$1,000,000	\$842,829	\$34,569,896	38
2024	\$1,000,000	\$858,700	\$36,850,705	37
2025	\$1,000,000	\$878,217	\$37,122,237	37
2026	\$1,000,000	\$866,738	\$37,664,943	37
2027	\$1,000,000	\$964,398	\$38,452,126	37
2028	\$1,000,000	\$959,145	\$38,879,318	38
2029	\$1,000,000	\$831,266	\$39,341,406	38
2030	\$1,000,000	\$950,232	\$39,535,078	39
2031	\$1,000,000	\$952,414	\$39,900,272	40
2032	\$1,000,000	\$969,756	\$40,386,337	40
2033	\$1,000,000	\$945,675	\$40,734,069	41
2034	\$1,000,000	\$801,353	\$41,907,035	41
2035	\$1,000,000	\$945,284	\$42,057,091	42
2036	\$1,000,000	\$929,744	\$43,043,059	42
2037	\$1,000,000	\$965,679	\$44,460,052	42
2038	\$1,000,000	\$899,995	\$44,619,996	43

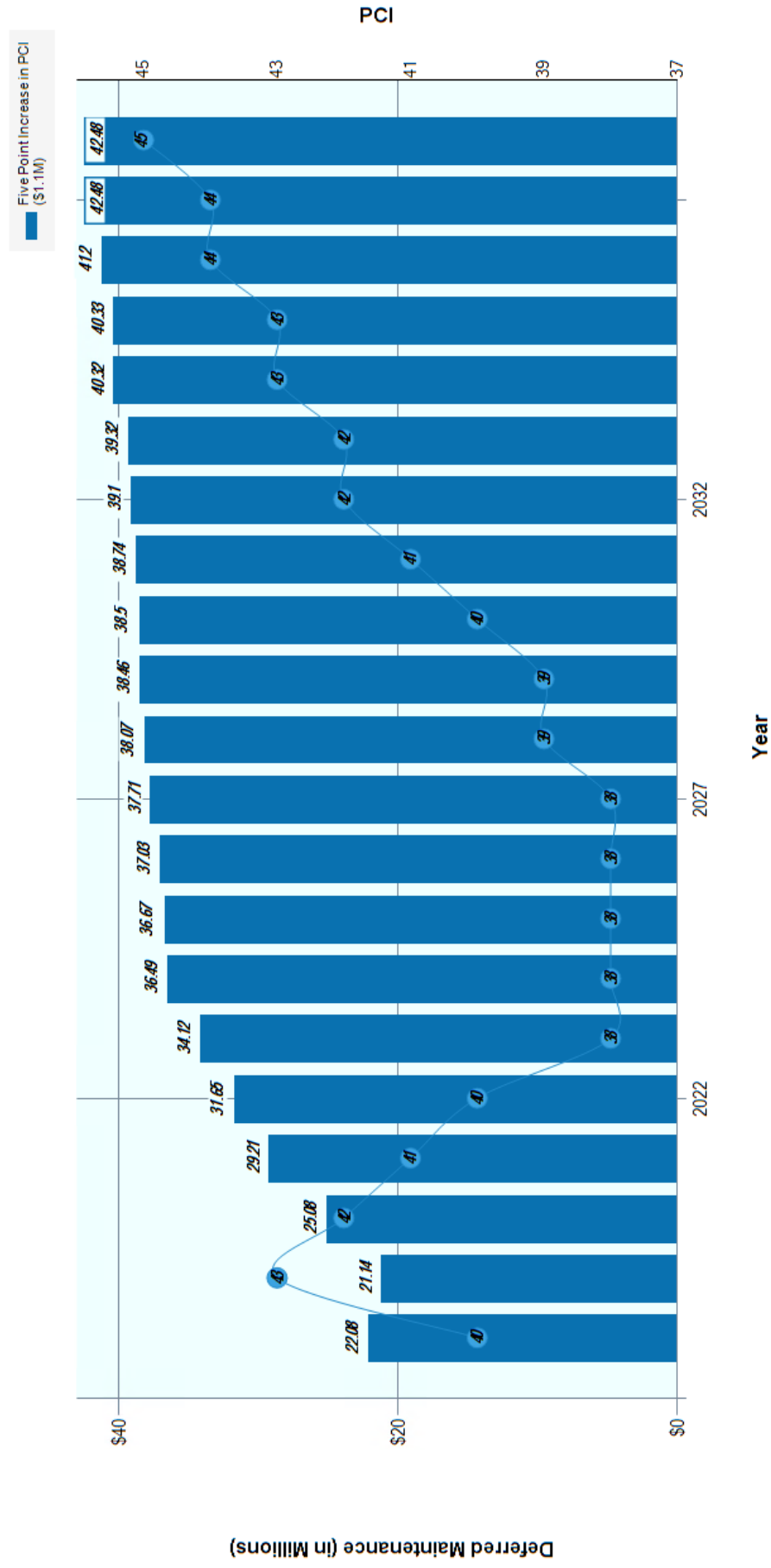


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Five Point Increase in PCI (\$1.1M) – In order for the City to increase their PCI by 5 points by the end of 20 years, approximately \$1.1 million per year would be need to be budgeted and the average amount of deferred maintenance would increase to about \$42M

Five Point Increase in PCI (\$1.1M)				
Year	Budget	Work Program	Deferred Maintenance	Average Network PCI
2019 (Prior to Treatment)			\$22,083,857	40
2019	\$1,100,000	\$945,101	\$21,138,761	43
2020	\$1,100,000	\$1,058,171	\$25,078,678	42
2021	\$1,100,000	\$1,049,738	\$29,213,292	41
2022	\$1,100,000	\$967,691	\$31,651,467	40
2023	\$1,100,000	\$939,037	\$34,120,866	38
2024	\$1,100,000	\$936,681	\$36,488,497	38
2025	\$1,100,000	\$957,058	\$36,672,424	38
2026	\$1,100,000	\$945,115	\$37,030,144	38
2027	\$1,100,000	\$1,041,889	\$37,714,440	38
2028	\$1,100,000	\$1,041,985	\$38,069,533	39
2029	\$1,100,000	\$898,814	\$38,460,038	39
2030	\$1,100,000	\$1,048,756	\$38,495,532	40
2031	\$1,100,000	\$1,051,531	\$38,737,811	41
2032	\$1,100,000	\$1,071,040	\$39,095,058	42
2033	\$1,100,000	\$1,030,639	\$39,315,723	42
2034	\$1,100,000	\$937,794	\$40,315,821	43
2035	\$1,100,000	\$1,047,634	\$40,329,224	43
2036	\$1,100,000	\$1,011,279	\$41,195,218	44
2037	\$1,100,000	\$1,048,978	\$42,483,195	44
2038	\$1,100,000	\$1,003,547	\$42,475,892	45

Scenario Comparison - Deferred Maintenance and PCI

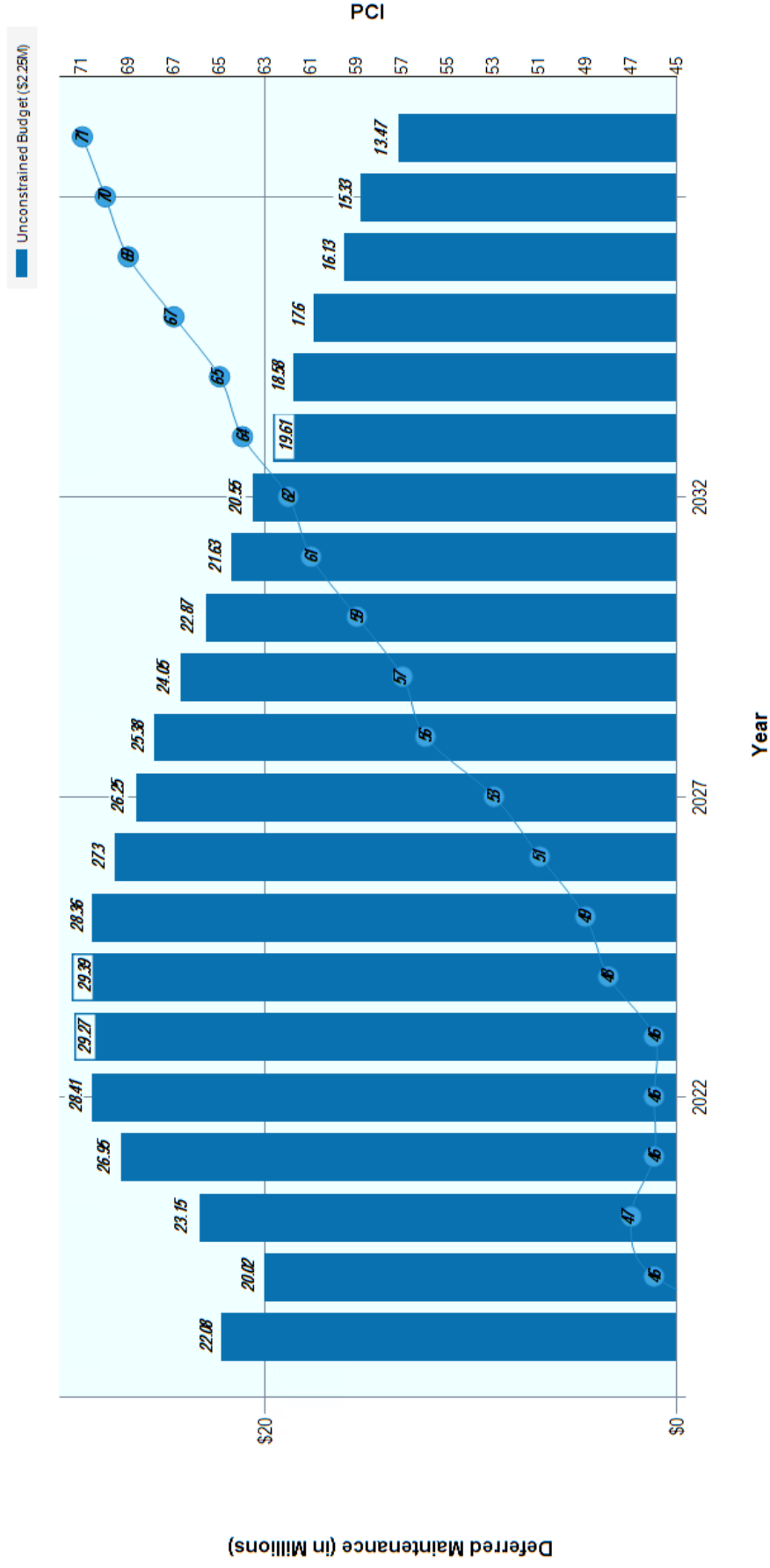


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Unconstrained Budget (\$2.25M) – In order to get the network to an optimal level to where only preventative maintenance is needed, at least \$2.25 million (Budget Needs Average) would have to be budgeted per year. Spending \$2.25M each year would increase the PCI to 71 and decrease the deferred maintenance to \$13M over the next 20 years.

Unconstrained Budget (\$2.25M)				
Year	Budget	Work Program	Deferred Maintenance	Average Network PCI
2018 (Prior Treatment)			\$22,083,857	40
2019	\$2,250,000	\$2,059,656	\$20,024,216	46
2020	\$2,250,000	\$2,041,335	\$23,154,350	47
2021	\$2,250,000	\$1,946,883	\$26,946,280	46
2022	\$2,250,000	\$1,911,588	\$28,408,414	46
2023	\$2,250,000	\$1,906,416	\$29,273,907	46
2024	\$2,250,000	\$1,908,416	\$29,392,181	48
2025	\$2,250,000	\$1,962,375	\$28,362,242	49
2026	\$2,250,000	\$2,035,724	\$27,302,958	51
2027	\$2,250,000	\$2,106,502	\$26,252,221	53
2028	\$2,250,000	\$2,153,032	\$25,375,464	56
2029	\$2,250,000	\$2,084,906	\$24,050,366	57
2030	\$2,250,000	\$2,095,138	\$22,872,466	59
2031	\$2,250,000	\$2,049,512	\$21,625,688	61
2032	\$2,250,000	\$2,068,026	\$20,549,029	62
2033	\$2,250,000	\$1,922,117	\$19,612,171	64
2034	\$2,250,000	\$2,032,150	\$18,578,976	65
2035	\$2,250,000	\$2,094,174	\$17,602,205	67
2036	\$2,250,000	\$2,233,619	\$16,133,038	69
2037	\$2,250,000	\$2,231,303	\$15,330,694	70
2038	\$2,250,000	\$2,067,585	\$13,472,694	71

Scenario Comparison - Deferred Maintenance and PCI



Scenario charts (Figures 5 and 6) showing the impact of the six budgets on street condition and deferred maintenance backlog over a twenty (20) year period can be found on the following pages and in Appendix II-B & C. The Cost Summary Reports, which provide information on pavement funding distribution by pavement condition, and the Network Condition Summary Reports, which project pavement condition trends, can be found in Appendix II-D as well.

Figure 5

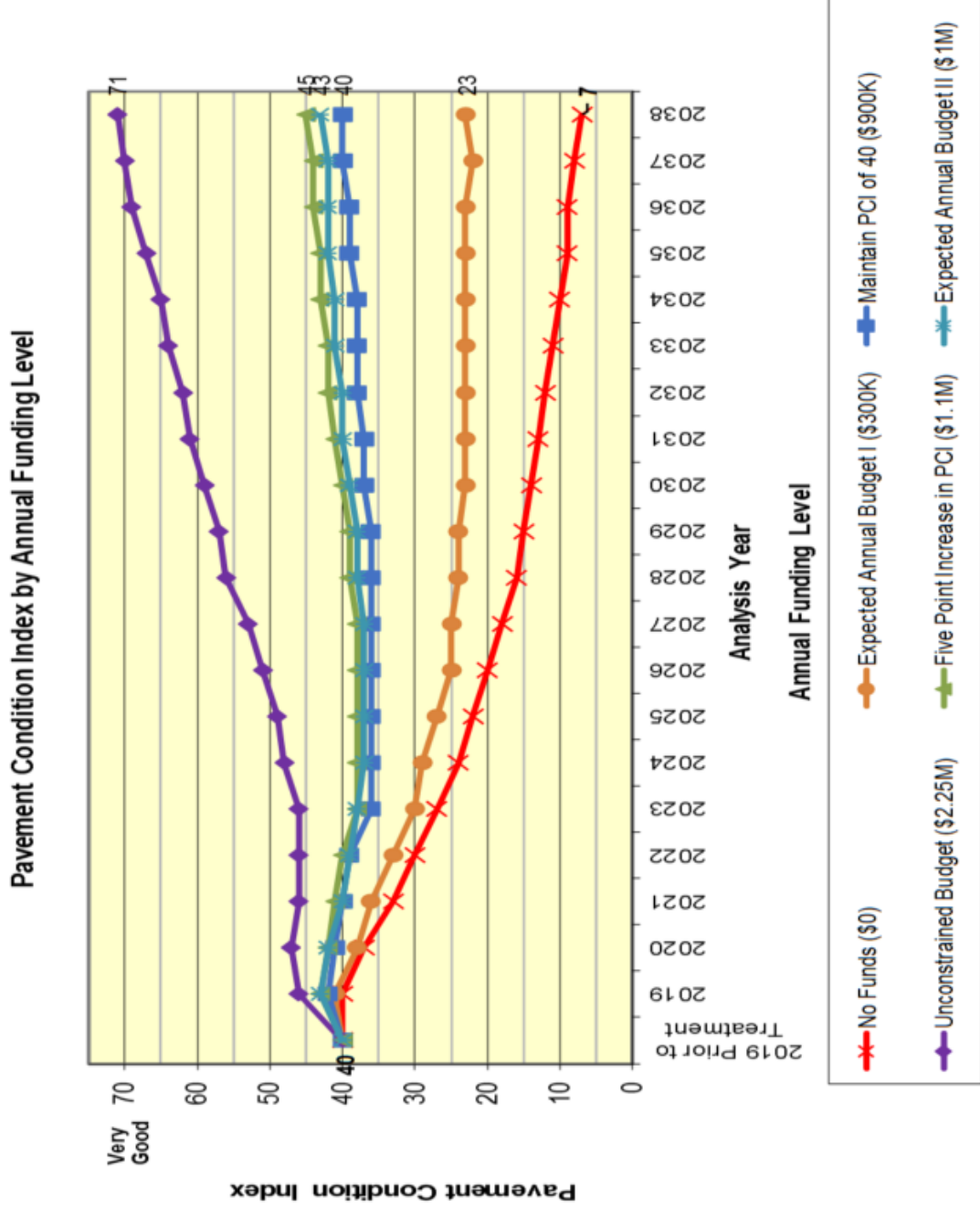


Figure 6

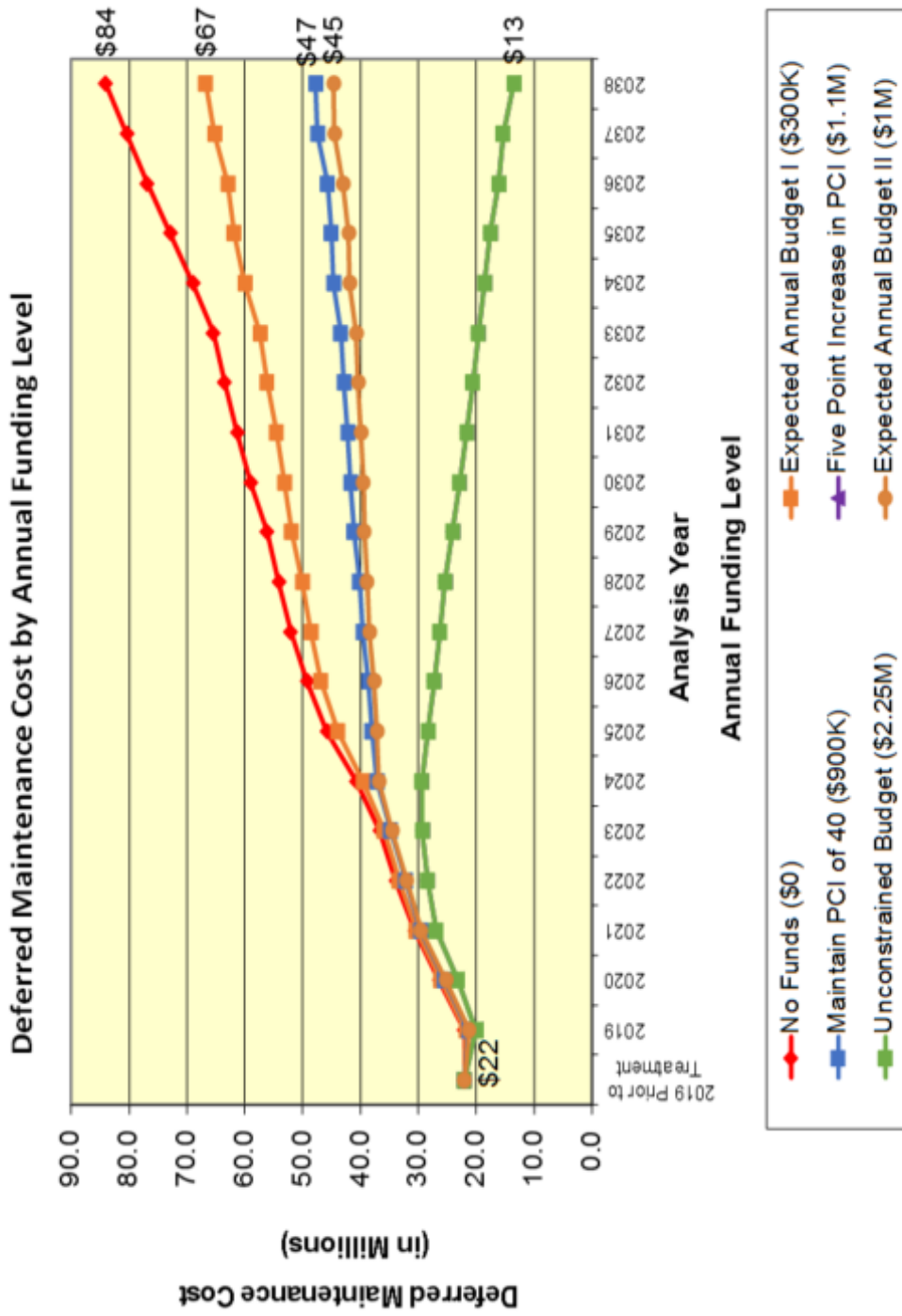
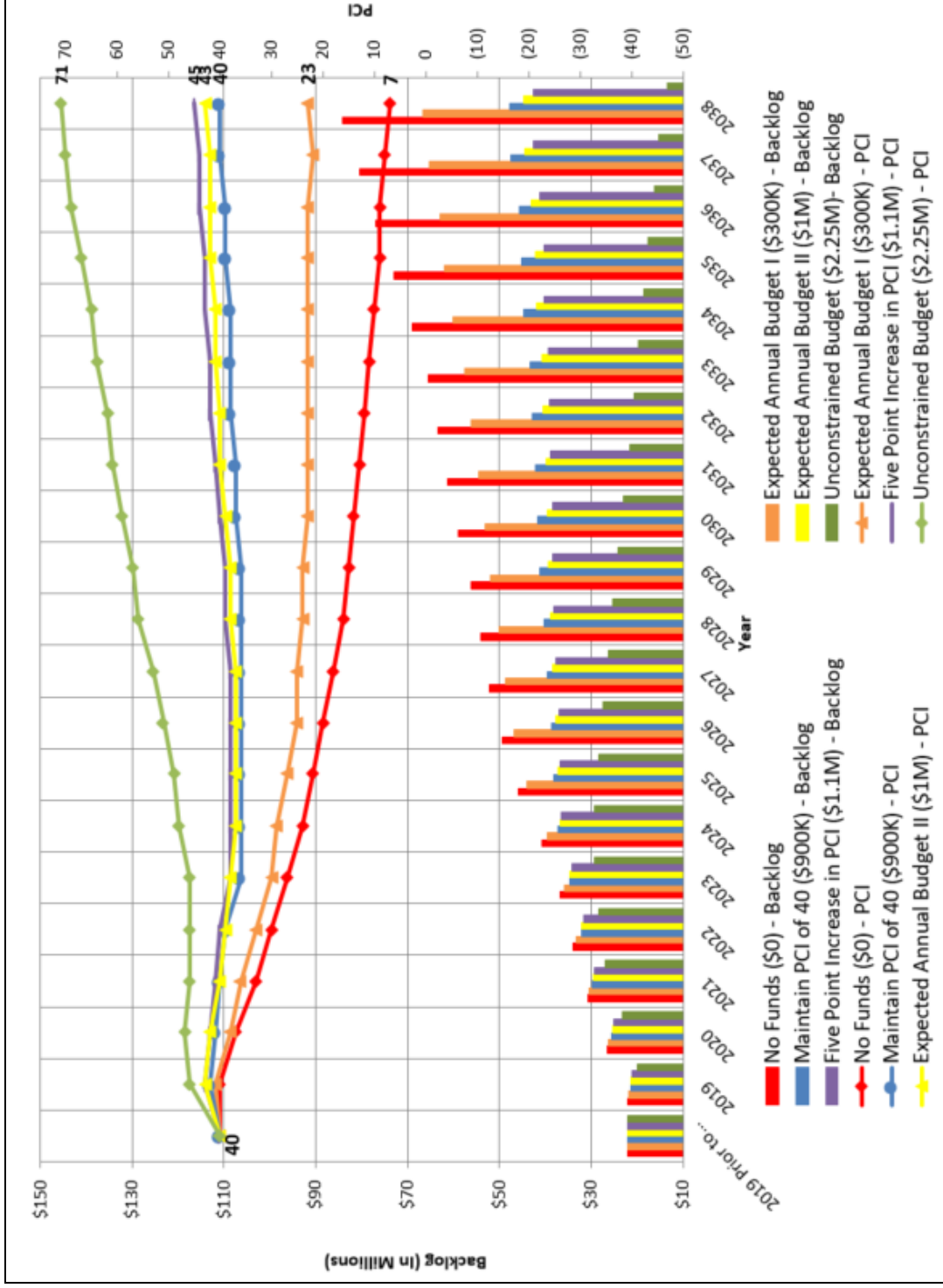


Figure 7

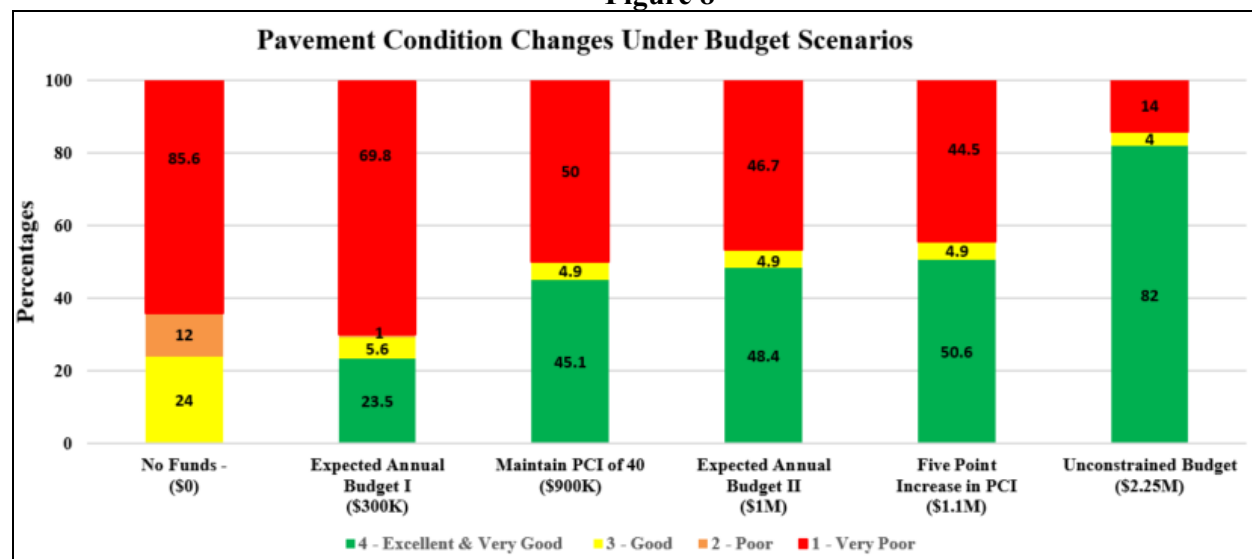
PCI & Deferred Maintainace Chart



The Figure 7 on the previous page shows the impacts of the City’s overall PCI and backlog for the 6 generated scenarios

Figure 8 contrasts the pavement changes under the analyzed budget scenarios. The percentage of streets in the “Poor” and “Very Poor” condition categories must be monitored as these represent the greatest liability to the City in regards to expense and serviceability off this really costly public asset.

Figure 8



RECOMMENDATIONS

Harris & Associates also recommends the Agency spending an annual budget of a minimum of \$950K. Spending this budget increase the PCI from 40 to 41 after 20 years while slowing the growth of the deferred maintenance backlog.

The City should utilize cost effective treatments where appropriate, such as slurry seals and crack seals and continue to evaluate emerging cost effective techniques like thin-bonded wearing courses and rubberized overlays. Maintenance and rehabilitation performed should also be recorded in the MTC PMP software.

Harris & Associates commends the City for its active participation in the pavement management program and also recommends that the City continue to maintain its pavement management program to be eligible for federal grants and funding. All arterials and collector routes should be re-surveyed every two years and all residential streets every five years. The costs for the distress surveys should be included in the annual pavement management budget.

The City should also perform annual database updates that include:

- Reviewing and updating the decision tree (maintenance activities and unit costs)
- Updating the street network when streets are annexed or newly constructed
- Continuing to include maintenance and rehabilitation activities

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The City should update its Finance Department with any changes or adjustments that have been made to the City's street network and subsystems (streets assets and pavement subsystems that have been acquired through annexation, deletion, etc.) for GASB-34 compliance.

The City should continue utilizing the StreetSaver Online GIS module or in-house GIS to assist in managing the streets within city limits. GIS technology is very useful to spatially view tabular reports that are derived from the pavement management system, such as scenarios, identification of maintenance and rehabilitation treatments, planning, maintenance and rehabilitation history, pavement condition index, etc. The tool is very useful for exporting information out to current GIS and AutoCAD programs.

Gridley's overall street system is currently in the range of MTC's "Poor" condition category. To help maintain and improve the current condition, certain projects have been recommended within the context of this program. Annual work programs for the expected annual budgets can be found in Appendix II-E. The report provides detailed listings of suggested maintenance projects for Gridley based on the overall PMP suggested needs funding and base annual budgets. The report also provides a first step in identifying segments to be repaired under Gridley's annual work programs.

LIMITS OF STUDY

It must be recognized that this report is limited to the existing pavement repairs. It does not include existing deficiencies for right-of-way concrete sidewalks, curb & gutter, drainage, trees, bus pads and non-structural improvements such as decorative crosswalks, medians, lighting and street furniture. Costs for these right-of-way repairs and improvements throughout the City would easily exceed the deferred maintenance costs (the cost of crucial maintenance work not performed in a specific year) identified in this report and can be identified and estimated separately in future reports.

The following recommendations generated by the Pavement Management Program are for planning purposes only. The resulting general recommendations are not intended to replace sound engineering judgment, which should dictate specific needs for an individual project. Draft project recommendations should be weighed against the actual approach the City wishes to utilize in scheduling the workloads for contracting purposes. Once a street segment is identified for repair, a closer site survey and detailed project repair scope is required.

Maintenance and rehabilitation projects should be based on a combination of the system's recommendations weighed against the City's preferences, budget constraints, and other contributing factors. In addition, further refinements may be warranted from an engineering staff review of the pavement condition. For example, a particular pavement section may be selected for treatment in a given year but the work may be postponed to coordinate activities with other planned work on-site, such as utility replacement work.

MAINTENANCE STRATEGY DEVELOPMENT

Based on the results of the condition survey and on input from the City, pavement maintenance/rehabilitation strategies were developed. A standard agreement at the outset was to identify the City's maintenance work program for the next five (5) years, showing resource alternatives that affect the maintenance backlog and increase the overall condition of the pavement system.

Certain strategies are recommended for the most cost-effective work program. A listing of the

maintenance activities utilized in the strategy development is presented in Section II. Each activity represents the type of work that has been recommended for the long-term maintenance recommendations of the City's streets.

ANNUAL BUDGET PROJECTIONS

The budgeting process was approached with the following in mind: generate a work program for the next twenty (20) years) based upon actual street pavement conditions and determine the funding levels required to maintain and/or improve the current level (PCI) of overall condition.

Based on current and projected pavement maintenance needs, annual work program alternatives have been prepared. A detailed work program for the City's expected annual budget at 14% applied towards PM can be found in Appendix II-E&F of this report

The following section provides a description of the methodology and rationale utilized in determining the recommended actions identified in this report.

MAINTENANCE STRATEGY ASSIGNMENTS

The PCI is used by the system to schedule maintenance activities for each pavement segment. The MTC PMP software recommends a specific maintenance activity based on the PCI and budget constraints. The City has selected a series of maintenance activities to apply to the pavement network. The unit costs for each maintenance activity account for various construction costs including labor materials, design, for construction inspection and for contingency. Definitions of each maintenance activity per category are defined as follows:

1. Crack Seals - A surface treatment generally utilized to prevent entry of water or other non compressible substances into the pavement.

Crack seals are used to fill individual pavement cracks to prevent entry of water or other non-compressible substances such as sand, dirt, rocks or weeds. Crack sealant is typically used on early stage longitudinal cracks, transverse cracks and reflection cracks. It is placed over the existing pavement surface and is typically applied by the City at three (3) year intervals.

2. Micro Surfacing – A surface treatment generally utilized to provide new wearing surfaces and prevent water penetration of the pavement surface, thereby extending pavement life.

Micro surfacing is a polymer-modified cold-mix paving system that begins as a mixture of dense-graded aggregate, asphalt emulsion, water, and mineral fillers. While conventional slurry seal is widely used as an economical treatment for sealing and extends the service life, micro surfacing has added capabilities including advanced polymers and other modern additives.

4. Overlays - The application of treatments that are more cost-effective alternatives to reconstruction of the entire pavement surfaces, but provide the required structural support.

An asphalt layer is placed over the existing pavement surface. Cold planing is typically performed prior to the overlay to provide a level surface for the overlay, reduce excessive crowning, and assure alignment with existing gutter line. This typically includes base repair and crack sealing prior to the application of an overlay. This treatment provides a new wearing surface and increased structural strength to the pavement section. An overlay is typically designed for a ten to fifteen (10-15) year life.

5. Reconstruction – The removal and replacement of either the pavement surface only or both the pavement and base.

When the pavement surface is severely distressed and has reached the end of its service life, reconstruction methods may be used. Some of these methods include Full Depth Reclamation (FDR) in which the old asphalt and base materials are pulverized, mixed with cement and water, and compacted to produce a strong, durable base for either an asphalt or concrete surface. Cold in Place Recycling is another method used in which two to five inches of the current road surface are pulverized down to a specific aggregate size, mixed with a rejuvenating asphalt emulsion, and then reused to pave that same road. After a reconstruction, the pavement segment is again considered new with a full life extension (typically 28 years).

MAINTENANCE DECISIONS

Once the City has selected the appropriate maintenance activities and calculated unit costs, the “Maintenance Decision Tree” (a StreetSaver application that list all the treatments and corresponding unit costs, found in Appendix III) was updated. This decision tree assigns appropriate treatments by the specific needs of the streets.

The decision tree lists costs associated with treatments on specific types of pavement according to the jurisdiction. StreetSaver® uses a decision tree to model the decision-making process that agencies follow to select a maintenance or rehabilitation strategy. The decision tree contains "branches" for each functional classification, surface type, and condition category. Jurisdictions can outline their maintenance and rehabilitation strategy, choosing a treatment for each branch.

After a decision tree is established, selected budgets and work assignments were generated for each work program on an annual basis. Using the MTC recommended pavement deterioration curve for each pavement surface type and functional class, StreetSaver calculates the PCI based on the condition survey; then depending on what category the PCI is in, a PM or rehab treatment is selected based on weighted effectiveness and available budget. Both current and future work requirements for each pavement segment within the city were then determined.

PAVEMENT MANAGEMENT PROGRAM REPORTS

This report contains a comprehensive assemblage of pavement management reports ranging from summary reports to annual maintenance and rehabilitation schedules. These reports represent reasonable projections of pavement maintenance needs and performance based on visual condition assessments, unit cost estimates, and pavement deterioration models.

It is important to note that pavement segment dimensions and surface area, along with the recommended treatment and repair costs as presented in the reports, are for initial planning purposes only and will be subject to project level evaluation, design, and cost estimation. This is noteworthy due to the "implied" accuracy of reporting length and width to the nearest foot, surface area to the nearest square foot, and treatment and repair unit costs and project estimates to the nearest penny and dollar, respectively.

SYSTEM MAINTENANCE

It is recommended that the City continue developing annual maintenance plans while also working towards reducing the City's present backlog of rehabilitation projects.

In order to ensure that report outputs are accurate and credible, it is essential that the integrity of all data files be maintained. Prior to generating scenarios, all necessary updates to unit cost information and treatment data should be complete. In addition, the entire pavement network will have to be re-surveyed at regular intervals, as noted earlier in this report. This will not only allow work to be scheduled based on the most current condition data available, but it will also provide City personnel with a means to monitor rates of pavement deterioration with better accuracy.

APPENDIX I

**PAVEMENT CONDITION INDEX (PCI) REPORT / REMAINING
SERVICE LIFE (RSL) REPORT**
(MAP INCLUDED)

APPENDIX II

BUDGET ANALYSIS REPORTS

- A. Budget Needs Report - Twenty Year**
- B. Average PCI by Annual Funding Chart**
- C. Deferred Maintenance Cost Trend by Annual Funding Chart**
- D. Budget Scenario Cost and Network Summaries**
- E. Annual Work Program – 300K**
- F. Annual Work Program - \$1M**

APPENDIX III

BACKUP DATA

- A. Section Description Inventory Report**
- B. Inventory of Applied Maintenance**
- C. Maintenance Treatment Decision Trees**